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# FIELD SPORTS OF THE NORTH OF EUROPE

# FIELD SPORTS

OF THE

# NORTH OF EUROPE

A NARRATIVE OF

# Angling, Hunting, and Shooting

IN

SWEDEN and NORWAY

By

# CAPTAIN L. LLOYD

Author of, "Scandinavian Adventures," "The Game Birds and Wild Fowl of Sweden and Norway," etc.

ENLARGED AND REVISED EDITION

LONDON: HAMILTON, ADAMS & CO. GLASGOW: THOMAS D. MORISON 1885

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## EDITORIAL PREFACE.

THE largely increasing interest felt throughout the United Kingdom, in the sister countries of Sweden and Norway, has suggested the publication of a new and enlarged edition, of what has been considered the best work relating to the field-sports of these northern parts of Europe. The number of individuals of all classes who leave our shores for Scandinavia, year by year, has of late grown more considerable; the larger proportion of these, however, only pay what is commonly described as a flying visit.

But, there is also a largely increasing number who go to this magnificent land of forests, mountains, lakes, and rivers with the intention of combining sport with the study of the picturesque, or who go with the object of sport alone. To gentlemen whose tastes lie in this latter direction, the present work cannot fail to be of the very greatest interest.

The author has been admired as a fine specimen of the English gentleman, combining in his disposition all the characteristics of the genuine sportsman,-active, intelligent, and observant,—and withal of an agreeable and modest He was an enthusiastic naturalist, spending the greater part of his life in the study of such subjects, and was thus qualified to an unusual extent to write on the subject of field-sports, his own personal experience and the life he led, as well as that of his associates in the north, being all in the direction indicated. In addition to the "Field Sports of the North," other three works have come from the pen of Captain Lloyd, two of which are on the same lines as this-his most famous and best known pro-These three are, first, "Scandinavian Adventures," comprising two large volumes; this work, however, consists 924746

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almost wholly of an account of animal life in the north rather than of personal adventures in connection therewith. Next, there came "The Game Birds and Wild Fowl of Sweden and Norway," and also "Peasant Life in Sweden." All the works are highly interesting, and written from personal acquaintance with the subjects with which they deal, and are somewhat uncommon; they are regarded as increasing in value as they become better known.

The "Field Sports," however, is the one by which Capt. Lloyd is best known, and in style comprises more of the personal narrative than any of his other writings. Though two editions have been issued in this country, it has now become scarce, and is seldom to be met with. On publication it excited much interest on the part of sportsmen in this country, and was highly commended by the press. The work has also excited much interest in some parts of the Continent, having been translated into several foreign languages, and been taken much notice of by the press abroad, especially on the part of that of Sweden and Norway.

The present edition is somewhat re-arranged, and the editor considers that in its present form the work is much enhanced. It is enlarged from the author's other and later writings. And is revised, inasmuch as some agricultural and topographical matters are omitted, both now being rather out of date, and each of which can be had to much better advantage in the ordinary guide books, now abundant and of excellent quality, but which was by no means the case when the "Field Sports" came for the first time from the press. By this means the work, as it at present appears, is greatly improved and brought more in harmony with the present time; and is, in addition, rendered still more emphatically a purely sporting work. Captain Lloyd's forte was sportsmanship,—not political or social economy.

The Editor desires to express his indebtedness to Messrs. Richard Bentley & Son, publishers, for permission granted to make extracts from our author's large and beautiful work, SCANDINAVIAN ADVENTURES (2 vols.).

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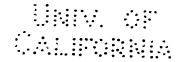
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# FIELD SPORTS

OF THE

# NORTH OF EUROPE.

### CHAPTER I.

First Period of Residence—The Lake Wenern—The Province of Wermeland—The Forests—The Chief Hunting-Master—The Author's Abode—Society—Second Period of Residence—The Author's Abode—Swedish Hospitality—Swedish Ladies—The Peasantry—The Author's Three Dogs—Game.

DURING the first period of which I here give a narrative of the proceedings, I was living at some sixty miles to the northward of Carlstad, which town is situated at the northern extremity of the noble Lake Wenern, well known to be among the largest and finest in Europe. During the two preceding years, I had made that part of the country my head-quarters, though it is true I had in that time wandered over almost all parts of Scandinavia.

As the Province of Wermeland was the principal scene of what I am about to describe, it may not be altogether out of place for me to mention that it is one of the largest in Sweden, being about one hundred and fifty miles in length by one hundred in breadth: it contains about 150,000 inhabitants, which, for Sweden, is rather a considerable population. The more northern parts of it are very hilly, or, I may say, mountainous; and, speaking generally, it may be described as one continued forest; the land under cultivation bearing no kind of proportion to that which remains in a state of nature.

Like the rest of Sweden, Wermeland is studded with numerous fine lakes, and it is also watered by several large streams. The principal of these is the Klar; which, having it is in the Norwegian mountains, at no great distance from the small town of Roras, so celebrated for its copper mines, after a southernly course of about three hundred miles, falls into the Wenern, near to Carlstad. This river is not navigable to any considerable distance from its mouth, in consequence of numerous cataracts; but immense quantities of timber, from two to three hundred thousand trees, it is said, are annually floated down its bosom from the interior. Indeed, it is perhaps to this noble stream that Wermeland is indebted for a considerable share of its present wealth and importance.

My residence was at a small hamlet, called Stjern, a short distance from the Klar, and situated very near to the eastern bank of a fine and considerable lake, the Răda, which, though narrow, could hardly be less than eight or nine miles from its northern to its southern extremity. The country hereabouts was covered with boundless forests, composed principally of pine: and, though not on a grand scale, it was very finely undulated. The prospects were pleasing and picturesque.

In this part of the country, there were no oaks; but the forests, more particularly on the shores of the lakes and rivers, were interspersed with considerable quantities of ash, alder, birch, etc.

On the opposite side of the lake, and at about two miles and a-half in a direct line across (for by land it was much more considerable) was the small village of Răda, the church at which place was a new and handsome structure, adding much to the beauty of the surrounding scenery. At something more than a mile farther to the southward, Mr. Falk resided on a snug property called Risäter.

This gentleman, of whom I shall by and by have occasion to make much reference, was the Ofwer Jägmästare, headranger, or chief hunting-master, of the Wermeland forests, which title alone would have given him the rank of a Captain in the Swedish army. But in addition to this, and in consequence of his meritorious services, in having been the means of ridding the country of very many noxious animals, he had received the honorary title of Hof Jägmästare, which may be

rendered Hunting-master to the Court, which put him on the footing of a Colonel. He was a tall and handsome man, about forty years of age; his appearance, with which his actions fully accorded, altogether denoting him to be possessed of great quickness and intelligence. In the different skalls, or battues, which he had commanded, he had, he told me, killed near a hundred bears; many of which, he stated, he had shot with his own gun. He had fortunately never been wounded by any of those animals, though, during the few years that he had held his appointment, a good many casualties had happened among the people who formed his hunting parties.

In conducting his "Skalls," Mr. Falk has obtained great and well-merited celebrity; I speak especially of those for bears. A few years since, he published a small treatise upon that subject, as well as upon the natural history of the animals themselves.

Mr. Falk had a considerable number of dogs, but all of which, with a single exception, he used for hare-shooting, an amusement to which he was very partial. Of his manner of conducting this sport, which is common throughout Sweden, I shall hereafter have occasion to speak. One of his rooms at Risäter was a perfect armoury, for, independently of swords, daggers, and pistols, upwards of twenty guns and rifles were suspended against the walls. These were very necessary, as on occasion of his attacking a bear, nearly the whole were usually put in requisition to arm his people and underkeepers.

My own abode, as I have just now said, was at Stjern, where my quarters, from a difficulty of procuring better in the vicinity, were humble enough,—for I only occupied a single room at a peasant's cottage. But they were economical, as including fuel, they only cost me about two shillings the week. My apartment, which had been used previously as a lumber-room, was about twenty feet square—and a very sorry one it certainly was; there was no kind of covering (at least until a subsequent period, when I had it papered), over the logs of which the house itself was constructed. It was provided with two small windows placed at its opposite extremities. These were about three feet square, and barricaded with

iron bars, to keep out unwelcome intruders; which, together with the dim light that found admittance into the interior, gave my apartment much of the gloom and appearance of a prison. Its great comfort, however, was a large and open fire-place, or rather hearth; this it much needed, for, during the first winter that I was its occupant, from the wind finding admittance through a variety of apertures, the cold was sometimes very severe. Indeed, I remember on one occasion, when a friend of mine, a member of the corps diplomatique, paid me a visit from Stockholm, that some port wine which he had brought along with him, and over which we had been enjoying ourselves until past midnight, was, next morning, frozen into so solid a mass that we were unable to get a drop of it out of the bottles.

After staying here for some time I took my leave of Stjern, and removed some two or three miles farther to the northward, to a retired cottage called Lap-Torp. It was rather romantically situated at no great distance from the eastern bank of the Klar, the surrounding scenery partaking of a bold and interesting character. My new landlord was named Nils Jonsson. Though he complained of the land being sterile, he was possessed, in appearance, of a snug little farm. Here I obtained a pretty good though rather small room, but as it was light and cheerful, it was an agreeable exchange from my dungeon-like abode at Stjern.

In the vicinity of my dwelling on the banks of the Klar, there were few resident gentry, though in the more southern parts of Wermeland this was far from being the case. In consequence of this, my society was principally confined to the families at Risäter and Uddeholm: as, at both of these places, however, I always met with a kind and hearty welcome, I whiled away, as may be supposed, not a few of my idle hours; my time, indeed, otherwise, would have hung heavily on my hands, for I was very indifferently provided with books; and it was only occasionally, owing to the kindness of my friends in Stockholm and Gothenburg, that I obtained a supply of a few newspapers.

Subsequently, I pitched my tent near the small town of Wenersborg, situated on the southern extremity of the great Lake Wenern. Ronnum was the name of my dwelling, or rather of the estate on which it was situated. The proprietor farmed the land himself; but having another residence at some distance, he let the house to me. It was immediately on the high road leading from Gothenburg to Wenersborg, and at about three miles from the latter town. It was very beautifully situated. In front, the country was picturesque, whilst at some three hundred to four hundred paces in the rear flowed the River Gotha, here a wide stream, of which the house commanded a splendid view. The property was well wooded, and many fine oaks adorned the park-like grounds that surrounded the house. Take Ronnum altogether, there are not many more beautiful spots in the midland or southern parts of Sweden.

The house contained fourteen or fifteen rooms, and might therefore be almost called a mansion. A tolerably large garden, and some considerable fishing rights, were attached to it; and for the whole, independently of taxes, which only amounted to a few shillings, I paid little more than ten pounds annually! This will give an idea of the very economical terms on which, as often happens when the proprietor of the estate is non-resident, one may rent an unfurnished house in the rural districts of Sweden.

Furniture in that country—provided a man, as with myself, be satisfied with that of a homely kind—is not a very expensive affair. It was not so to me at least, for on taking possession, I supplied myself with everything requisite at a most reasonable outlay. Chairs, for instance, cost me about three shillings the dozen; large folding dining-tables, at three to four shillings each; a chest of drawers about the same sum, and everything else in proportion. But though well enough made, they were of simple deal, and purchased besides in Gothenburg, where such articles, manufactured by the neighbouring peasantry at their leisure hours, are much cheaper than in the rural districts. Cooking utensils and crockery were nearly as cheap, as well as fire-wood.

And Ronnum had the farther advantage of being so near to Wenersborg, then considered one of the cheapest markettowns in that part of Sweden, as to give me the opportunity of supplying the larder expeditiously, as well as economically.

As it may be of interest to some, I insert below the prices of a few of the common necessaries of life. But it must be remembered, that in seasons of scarcity, the prices of some of the articles enumerated, such as grain, vary often from fifty to one hundred per cent. These prices also apply to twelve or fifteen years ago; for since that time, owing to various circumstances, the cost of provisions has considerably advanced in the town in question: A score of eggs, 4d. to 6d.; a pound of beef or mutton, 2d.; a pound of cheese, 2d.; a pound of butter, 4d.; a gallon of milk, 2d.; a sack (four bushels) of potatoes, 1s. 6d.; a sack of oats, 3s.; a sack of barley, 6s. to 7s.; a sack of wheat, 12s. to 14s.

There were several pretty places belonging to the gentry in my vicinity. Amongst the rest, Gäddabäck, or the pike brook, where afterwards I lived myself. For the most part, the residences were delightfully situated on the banks of the Gotha.

Thus I had no want of neighbourhood, and all evinced towards me, as a stranger, the utmost courtesy and good-will, which made my residence in that part of the country very agreeable. Hospitality and a hearty welcome, as regards the rural districts at least, may be said to be amongst the characteristics of the Swedes.

And happily a very friendly feeling appeared to exist amongst the neighbouring gentry, so that society was not, as is too often the case elsewhere, divided into sets; but we all met together on the most cordial and friendly footing. The intercourse between the several families was pretty frequent. Dinners were given occasionally, but small evening parties were of every-day occurrence.

These social meetings were almost invariably enlivened with music, in which the Swedes are generally proficients, and to which they are devotedly attached. They are justly proud of their great musical genius, Jenny Lind, whose extraordinary vocal powers have been, and still are, the theme of admiration in Europe as well as America.

And our little parties not unfrequently finished with a

clance, of which, as well as of music, they are equally fond. The Swedish ladies are very admirable dancers, and the gentlemen also; but according to our English notions, exhibit rather too much action.

But cards were the prevailing attraction of the evening—with the elder portion of the company at least, few of whom could resist the pleasure of taking a part. Whist, Boston, L'Hombre, Vira—the last peculiar to Sweden, and said to be the most intricate of all games—were those most in vogue. But Killé, or Camphio, Gropois—the latter resembling the French game, La Bouillote—and Faro, were not unfrequently played.

Speaking generally, card-playing is a perfect passion with a Swede, and if he be an idle man, the pack is seldom out of his hand, morning, noon, or night. To myself, who never shared in that amusement, this card-playing was an excessive bore.

During the continuance of these little parties, fruits, confectionary, as well as refreshments of various kinds, were always served in abundance, and the evening usually concluded with a petit souper.

Their great dinner parties, as indeed is commonly the case everywhere, and in all countries, were somewhat heavy affairs; for the eternal courses of roast and boiled—French cookery not being much in vogue—often lasted for near three weary hours; and I, who am contented with a single joint, wished myself anywhere else than in the banquetting-hall.

A custom is prevalent in most parts of Scandinavia, it may be proper to remark, that before the announcement of dinner, the guests partake of a cold collation, to give, as it is emphatically called, a stimulant to the appetite. A small table is laid out in an adjoining room, furnished with various liquors, and a variety of good things, such as caviare, smoked salmon, anchovies, butter, and cheese.

At table a fair proportion of wine is drunk, though seldom more than a glass or two after the meal is over, for the gentlemen always retired to the drawing-room along with the ladies; and coffee was commonly served up soon afterwards.

The upper classes in Sweden are very moderate in their potations, rarely drinking to excess. In point of fact, and to

their honour be it spoken, I do not believe that, during my long residence in that country, I saw half-a-dozen individuals, in what we should call the rank of gentlemen, in a state of inebriety. What a contrast this to the scenes which were once too frequently witnessed in England!

These social parties were the more agreeable—and the remark applies to society in general in Sweden-not only from the good feeling, but from the very good manners that universally prevail. The Swedes, like the people of other countries, have their faults; but this I can say conscientiously, that I do not believe there is a more innately courteous and polite people on earth; and furthermore, that a man must bring it on himself, if an offensive observation be made to him, or in his hearing, when in company. Even when in a somewhat inferior station in life, the easy, good, and unembarrassed manner of the Swede, so greatly superior to that of the same class in England, has often struck me forcibly. matter is easy of explanation, for in Sweden the aristocrat does not consider himself degraded by mixing in society with people much beneath him in station—a feeling so contrary to that prevailing in England, where it is somewhat questionable whether the tradesman has an opportunity even once in his life of sitting side by side with the great man; and the Swede is, in consequence, not only enabled to rub off the rust of his position, but to acquire a certain degree of polish.

As with us, the Swedish ladies are passionately fond of flowers, and their boudoirs and drawing-rooms are almost universally decorated with various exotics. A pretty parterre is always to be seen near the house; but the variety of flowers is not so great, nor do they all possess the same exquisite scent as in England. Some violets, for instance, though in outward appearance nearly the same, are totally void of perfume. In the early part of the spring, after the inodorous but beautiful snowdrop has drooped its head, several of the forest-flowers—amongst the rest the primrose, the white and blue anemone, and the lily of the valley—emblem of the purity of the fair owners—beautify their gardens; and as the season advances, the rose, the jasmine, the

carnation, the honeysuckle, and the sweet-scented briar, shed their delicious fragrance around.

The dahlia, which on my first residing at Ronnum, was hardly known in that part of the country, is now become common everywhere. Thanks to the kindness of some of my English friends, I had a splendid collection of these beautiful flowers when residing at Gäddabäck, which were the admiration of every one. But after a time, the climate caused me to tire of horticultural pursuits, for one Midsummer's Eve there came so severe a frost as to destroy the greater part of the dahlias; and on the 7th of September of the same year, a second frost, that totally cut up the few I had been fortunate enough to save. This, it is true, was an unusual season.

But though the Swedish ladies are thus fond of flowers, it is seldom anything in the shape of a greenhouse, in the more northern districts at least, is to be met with. This struck me as somewhat singular: for in a country like Sweden, which for one-half of the year is fast bound in the iron chains of winter, in which time little besides a sea of snow meets the sight in every direction, one would have naturally supposed that few who could afford it would be without a conservatory, to delight the eye and the senses amid the general desolation of the scene.

It is not a little remarkable that one of the coldest countries in Europe should have been the cradle of the great Linnæus, the father of systematic botany.

The Swedish gentry, speaking generally, are not much given to out-door amusements, and seldom engage in more than very moderate exercise. Nutting expeditions, pic-nics, are less frequent than with us in England, which is the more surprising, as from the summer being so short, it might naturally be expected that they would make most of the fine weather. The winter is their grand social season, at which time they usually have feasts, balls, to satiety, and, out of doors, provided the weather be favourable, sledge parties are the order of the day.

The peasantry in my vicinity were generally in comfortable circumstances. Those that farmed their own ground, as was the case with very many, were well off; and even the Torpare,

the class who hold small homesteads under others, had little to complain of. They had substantial dwellings, and, so far as fell under my observation, sufficient and wholesome provisions. The mere day-labourer, or he whose bread altogether depends on the wages he may earn, is almost unknown in the rural districts of Sweden; for almost every one, even the very poorest, has a small holding, either rented, or of his own which, in part at least, serves to support him.

Wages with me, taking winter and summer together, it may be proper to remark, did not exceed sixpence to eightpence the day; and I am inclined to believe that, as respects the rural districts, this may be assumed as the average of wages throughout Sweden. In towns, more especially if a man is expert in the use of the axe, can carpenter a little, in short, he may probably earn double that sum.

Serious crimes were rather uncommon in my neighbourhood, but petty thefts were not very rare. I speak not, however, from personal experience, never having suffered beyond a very trifling extent. That there should be rather more than an average of worthless characters in my neighbourhood, as compared with the country in general, was little to be wondered at, for Ronnum was not only situated close to a navigable river, always the haunt of disreputable characters, but near to Wenersborg, which in the old Norwegian wars had been a garrison town, and the population in consequence somewhat demoralised.

Drunkenness, the besetting fault of the lower classes in Sweden, as the passion for cards is of the higher, was unfortunately very prevalent amongst my poorer neighbours, and the cause probably of a large portion of the crime that did exist.

While residing at Stjern and Lap-Cottage I had three dogs; and as I shall hereafter have occasion to refer much to these, I shall now speak of their qualifications.

One of them, called Brunette, was brown, with pricked ears, and, excepting her tail, which turned over her back, much resembling a fox in appearance. I procured her two years before at Muonioniska, in Lapland; and though an arrant coward, and frightened almost out of her senses at the sight

or smell of a wild beast, she was, in the opinion of every one who had witnessed her performances in the forest, among the best for capercali (or cock of the wood) shooting that had ever been seen. She had an extraordinarily fine nose, was never tired, and, from being much attached to me, became so great a favourite, that she was my almost constant companion.

Another, named Hector, was black, his ears pricked, and his tail curled; in fact, he was rather a cur in appearance. I purchased him, during the preceding autumn, of a peasant, named Daniel Andersson, residing at a place called Tissjöberg, in Norway. This man, in his day (for he was then advanced in years), had been a very celebrated bear-hunter; he had killed, he stated, upwards of sixty of those animals, and thirteen of them with the assistance of this very dog. Though he spoke highly of the performances of Hector, and though I paid, by comparison, a considerable sum for him, he was by no means the capital dog his master's representations had led me to expect.

My third was named Paijas, the signification of which is harlequin. He was of a good size, very strongly built, and, with the exception of his toes, which were white, he was of a coal-black colour; his ears were pricked; and his tail, which was bushy, he usually carried much in the manner of a fox; his countenance depicted, and it told truly, a great deal of courage.

Paijas came originally from the interior of Norway, and subsequently into the possession of Mr. Falk; but a little while prior to the period I speak of, that gentleman was kind enough to present him to me: he was then, however, old and worn out, and incapable of any severe exertion; though in his younger days a better dog for bears had never been seen in that part of Sweden.

He had been trained, I believe, originally, by a very celebrated chasseur, of whom I shall have occasion to speak hereafter: his courage, the first time he saw a bear, and it was in the winter season, nearly cost him his life; for the instant he got a view of the beast, he sprang at his head, and attempted to fasten; but he quickly had cause to repent of his temerity for the bear grasped him in his iron paws and dashed him

with violence down into the snow. His master now thought it was all over with him; but presently afterwards he had the gratification of seeing him emerge from his covering, which was loose and deep, with only a few slight wounds and bruises.

From this time forward, however, Paijas benefited by the severe lesson he had received, and never afterwards tried the same desperate game, but contented himself, as I myself witnessed on more than one occasion, in making his attacks in a much more prudent and cautious manner.

These two, Hector and Paijas, were the only dogs that were even tolerably good for a bear in all that part of the country.

Having described my dogs, it may not be out of place for me to mention that many descriptions of game, as well as of noxious animals common to Scandinavia, were to be met with in the vicinity of my quarters. Game was, however, very scarce; and this, whatever may be said to the contrary, I believe to be generally the case throughout the peninsula.

When a sportsman first visits Sweden, he would be led to imagine, from the nature of the country, that game might be very abundant; but he will soon find the contrary to be the case; for he may often walk for hours together in the finest shooting-grounds imaginable, without finding a bird or other animal. For a while I was at a loss to account for this scarcity, which I knew not whether to attribute to the climate, the vermin, or other cause. But, after passing some time in Sweden, my wonder ceased; and it was then no longer surprising that there should be so little game (I here speak of the country generally), but that there should be any at all; as, from the constant war that is carried on against it throughout the whole year, and this in spite of the laws enacted for its preservation, one would be inclined to think that game would be exterminated altogether.

In the summer, and often when the birds are hardly out of their shells, the slaughter is commenced both with traps and guns; and during the subsequent long winters of five or six months' duration, every device which the ingenuity of man can invent, is put into execution to destroy them. But the spring of the year, during the period of incubation, is the most fatal for the feathered tribe; for at that time birds are, of course, more easy of approach, and they are then, at least such is the case in most parts of Sweden, destroyed without mercy.

In corroboration of these facts, I may quote Mr. Förste Hof-Jägmästare Greiff, who has published an interesting little work on Scandinavian Field Sports. Speaking of the scarcity of game in Sweden at the present day, that gentleman says,—"In many woods and districts where fifty years ago abundance of both capercali and black game were to be found, not a bird now exists. In the spring, when the birds assemble for the purpose of pairing, people place themselves in ambush and shoot without distinction cocks and hens, by which means the birds are frightened and dispersed; and afterwards, when the spring is more advanced, and the young are hatched, it is certain the old hen will be sought after before they are able to fly; by one shot a whole brood of seven or eight birds are thus destroyed, which in the month of August would have been fit for table, and have reinforced the larder."

Among the feathered game which were to be found in the vicinity of my quarters, I may enumerate the capercali, the black cock, the partridge, the woodcock, the snipe, the hazel hen; and also several descriptions of wild-fowl.

Of other birds not coming under the denomination of game, we had the wood-pigeon, the thrush, the fieldfare, etc. But almost the whole of these usually took their departure on the setting in of the winter.

Partridges were very scarce; indeed, I only remember seeing two coveys during my residence in that part of the country.

Pheasants were not to be found thereabouts, nor do I believe they exist in either Sweden or Norway, the climate being probably too cold to allow of their finding sustenance during the long and dreary winter.

The common grouse I never met with during my travels; but the ripa, which is a species of the *tetrac-genus*, and of which I shall have occasion to speak more hereafter, is in some abundance in all the northern districts of Scandinavia: in the winter time, indeed, those birds were to be found in the vicinity of Stjern.

Among four-footed game we had that noble animal the elk, which once abounded in all parts of Scandinavia, but which is now seldom to be found except in particular districts. In the vicinity of my quarter elks were only occasionally to be met with, though at some eighty or a hundred miles farther to the northward, near to and beyond the line of demarcation running between Sweden and Norway, they are still rather numerous. We had neither the roebuck nor the red deer, though both are to be found in various parts of Sweden; nor were rein deer often met with at less than a hundred miles from the place of my abode. The latter animals are still numerous in the northern parts of Scandinavia. I have fallen in with them in a wild state, as well upon the Hardanger, and Dovre mountains in Norway, as upon the range of hills separating Swedish from Norwegian Lapland.

Of hares there was a fair sprinkling throughout the forest, but rabbits, excepting in a tame state, I never met with in Scandinavia, and though I have made many inquiries, I could not learn that they exist in that part of the world.

Otters abounded in all the rivers and lakes, and that curious animal the beaver was to be met with in some of the Wermeland streams. The common brown squirrel was tolerably abundant everywhere. Badgers were numerous, and the lemming of which so much has been said of late years, though not usually to be met with hereabouts, had, some little time prior to my visiting Wermeland, overrun the whole country during one of the periodical migrations common to that animal, from the distant mountains. I have seen lemmings in considerable numbers on the Hardanger range, of which I have just spoken.

Of beasts of prey, we had almost every description common to the Scandinavian forests. Among the rest the bear, the wolf, the glutton, the lynx, the fox, etc. But, fortunately for the inhabitants, these several varieties of destructive animals were in no great abundance.

Bears were said to be as numerous in Wermeland and the adjoining province of Dalecarlia as in any other districts of Sweden; this is attributable to the thickly wooded state of the country.

Among birds of prey to be found in the vicinity of my quarters, I may enumerate the eagle, the hawk, the owl, the raven, etc., and what is sometimes considered to belong to the class, the grey crow. I have often seen this last-mentioned bird in flocks of from one to two hundred. Rooks I never observed in any part of Scandinavia; the climate, I apprehend, being too severe to allow of their obtaining food during the winter months. But jackdaws I have occasionally noticed in the midland and southern provinces of Sweden.

In the following pages the reader has an account of my sporting experiences in connection with most of the foregoing. But before proceeding with the main scope of the volume, a few chapters shall be devoted to the writer's performances with the rod. There was very good fishing at Ronnum, and it may be well to say something of the fish inhabiting the Wenern, the river Gotha, and other neighbouring waters. In giving an account of my piscatorial experiences, I don't forget that the enthusiastic English sportsman feels comparatively little interest in other than the salmon, and those sorts allied to the salmon, and to these attention shall be chiefly devoted. At the same time, for the sake of completeness, reference may be made more or less briefly to most of the varieties found in the neighbourhood indicated. To myself as a naturalist, the study of all sorts was a source of no small interest.

### CHAPTER II.

Scandinavian Piscatorial Bibliography—The Common Perch—Sub Species—The Spawning Process—Growth—Size—The Pike-perch—Habits—Not tenacious of life—Spawning—The Common Ruffe—Characteristic features—Spawning—Habits—The Rough Tailed Stickleback—Its appearance—Pugnacious disposition—Curious Spawning habits.

FOR the information of the ichthyologist, it may be proper to mention that the following are the chief works treating of

the fishes of Sweden and Norway, viz.: Artedi's "Ichthyolo-' gia," Lugd. Batav. 1738; Pontopiddan's "Natural History of Norway," (Engl. Transl. London, 1755); Linnæus' "Fauna Suecica," 2nd Ed. 1761; Retzius' "Fauna Suecica," 1800; Nilsson's "Prodromus Ichthyologiæ Scandinavicæ," a concise treatise published in 1832; "Fiskarne i Mörkö Skärgård," 1835, by Ekström, and subsequently translated into German, under the title of "Die Fische in den Scheeren von Mörkö"; "Skandinaviens Fiskar," an incomplete though admirable work, jointly edited by Professor Sundevall, M. Ekström, and the late lamented Professor B. Fries, and most beautifully illustrated by that highly talented artist, M. von Wright; and "Danmark's Fiske," by M. Kröyer, also a very superior work; but the best is Professor Nilsson's recent work, it gives a full account of the Scandinavian fishes, with the results of the latest researches.

The Common Perch (Perca fluviatilis, Linn.) was abundant with us, as well in the Gotha, as in the Wenern. This fish is widely distributed over Scandinavia, being found in most of the lakes and rivers from the extreme south of the peninsula to Lapland; indeed, from its larger size in the far north, it is believed to thrive better there than elsewhere. It is also found in the Skärgård (as the belt of islands fringing the Scandinavian shores is called), off the eastern coast, where the water, however, is only brackish; but more generally near to the mouth of some lake or river, and seldom or never regularly out to sea.

The President M. af Robson speaks of a sub-species of perch, found in the Lake Tisaren, in the province of Nerike, which goes by the name of Skållingar. "Nothing is known," that gentleman tells us, "regarding their propagation, neither is milt nor roe ever found in them. They resemble in appearance the common perch, but are more slender in form; in proportion to the body, the head is larger than that of the perch. The back is black, the upper part of the body, on the contrary, lighter or of paler colour than the perch. For the most part they are found singly, or in small companies, never assembling in large shoals. They are scarce, and seldom exceed half-a-pound in weight."

The so-called Rud-Abborre (the same spoken of by Linnæus as found in a pond near Upsala, a fish which, from its crooked and elevated back, was at one time imagined to be a hybrid, between the crucian and the perch) is believed by Nilsson to be a variety of the latter; and by Ekström its malformation is ascribed solely to local circumstances.

The flesh of the perch is in Sweden, as in England, held in high estimation, more especially that of such as are captured in salt water. It is believed, moreover, to have this peculiarity, so uncommon with the finny tribe, that one may eat of it daily for a long time without being surfeited. Its flavour, however, depends much on the water from which the fish is taken. Those from shallow lakes, with grassy bottoms, are smaller, leaner, and have less flavour than such as are bred in large lakes, where the water is clear and deep, and where there is a current, with a stony bottom. If the fish be kept for a short time it loses its flavour, for which reason it is commonly dressed as soon as may be, after it is caught; and to make assurance doubly sure on this point, there are those barbarous enough to pop the poor fellow, living as he is, bodily into the boiling water!

But it is not alone for the table that the perch is valued in Sweden (such, at least, was the case until very recently), for a very strong glue is made out of its skin. This, when dried, is steeped in cold water, and after the scales have been scraped off, it is placed within a bullock's bladder, which is tied so securely at the mouth that no water can penetrate. The bladder is then placed in a cauldron, and boiled until the skin is dissolved. The scales are also at times made use of in the mounting of rings and other ornaments. It is not many years since, indeed, that they were used in embroideries on ribbons, reticules, etc.

In my vicinity, the spawning season with the perch was from about the middle of April to the end of May, or it might be that it extended into the earlier days of June. Its commencement and termination was greatly influenced, however, by the state of the spring. The perch pass the winter in the deeps; but at the breaking up of the frost, they, in large shoals, make for the strand; for such spots, more especially,

in which the water is pretty deep, the bottom stony or sandy, and overgrown with the common reed (Arundo Phragmites, Linn.), or where it is strewn with boughs of trees, etc. But if such localities are not to be met with, the "lek" is carried on amongst clusters of rushes (Scirpus, Linn.) and river horsetail (Equisetum fluviatile, Linn.)

The spawning process with the perch, is said to be somewhat peculiar. Unlike the ova of other fish, which, simply enveloped in a mass of gelatine, readily separate as soon as deposited by the female, those of the perch are enclosed in a net-like membrane that keeps them attached together.

The fish, to get rid of the ova (so goes the story), rubs her belly against a sharp stone, or a stick, until the membrane in question becomes attached to it, when, wriggling her body, she makes a quick forward movement, and thus piece by piece, draws out the string of eggs, in appearance not unlike that of the toad, and which is often from five to six feet in length. Some, indeed, go so far as to aver, that to facilitate this operation, she introduces the point of a reed into the vent, to which the gelatine becomes fastened, and as a consequence when she moves forward, the string follows in her wake.

The perch is very prolific. According to Bloch, two hundred and eighty-one thousand eggs have been found in an individual of only half-a-pound in weight; but by some this is considered an exaggeration. The fish itself, nevertheless, is not proportionately numerous. Several reasons are assigned for this. First, that there are many more males than females, which is said to be a well-ascertained fact. Secondly, that owing to the roe adhering together, it is more easily consumed by fish of prey and water-fowl; and, lastly, that from the eggs being strung together, they are more liable to be cast ashore by storms, where they soon perish.

The perch is of slow growth. Kröyer says, that at the commencement of the first winter, the young fish are only an inch in length; in the third year, about six inches, and the weight three ounces; and in the sixth, their length sixteen inches, and weight one pound and a half. Swedish and Danish naturalists seem to be of opinion, that it is not until its third year that this fish is capable of procreation.

With us at Ronnum, the perch did not attain to any considerable size. I myself never killed one of more than three pounds weight, nor did I ever hear, from an authentic source at least, of any perch much exceeding five pounds. The monster head—two spans in length—spoken of by Scheffer, as preserved in the Church of Lulea, in Lapland, and assumed to be that of a perch, Swedish naturalists of the present day regard as that of some other fish; and, moreover, not a Sebastes, as Cuvier seemed to have imagined.

The perch is captured in Sweden by a variety of devices, but in summer chiefly, perhaps, with hook and line. In my neighbourhood, more especially in the Wenern, great things are at times done by this method. "About midsummer," so writes a friend, resident on the northern shores of the lake, "a couple of men may, in the course of three or four hours, capture fifteen to eighteen lispund—that is, from three hundred to three hundred and sixty pounds."

At this season, perch may frequently be seen in large shoals near to the surface, and continually leaping out of the water in pursuit of small fry, insects, etc. During the chase, it often lashes the water with its tail, thereby creating a particular sound, which the fisherman imitates by snapping his finger in the water, in order as he imagines, to attract the shoals to him.

The Pike-perch (Lucioperca Sandra, Cuv.), apparently so named in reference at once to its appearance and its habits, was abundant in my vicinity, or rather in the Wenern, for though we occasionally fell in with it during our fishing excursions in the Gotha, it was rare. It is pretty common in most of the large lakes in the more midland and southern provinces of Sweden; and at times a variety of the species is found in the eastern Skärgård, as well as in sundry of the bays and inlets of the Baltic. Singularly enough, it seems a mooted point amongst Swedish and Danish naturalists, whether this fish be an inhabitant of the Norwegian lakes or not.

As regards the waters of the interior at least, the learned in Sweden and Denmark only admit of a single species of pike-perch; but the fishermen in my neighbourhood spoke (erroneously, no doubt) of a second. That which spawned first, and which they described as the larger and darker in colour of the two, they called the Is—, or Ice-Gös; and the other the Aborre—, or Perch-Gös.

The pike-perch's movements in the water are described as heavy and ungainly, and his disposition dull and inert. Hence the saying: "Dum som en gös," that is, stupid as a pike-perch.

"This fish," so we are told by Ekström, "prefers deep, clear, and pure water, where the bottom is of stones or sand. On clayey bottoms, where the water is easily rendered turbid, he is never, so far as my experience extends, to be found; and if found at all in such localities, it is only very rarely, and then by accident. Kröyer says also: "The gös delights in deep water, with sandy or stony bottoms. Under other circumstances, it would seem scarcely to thrive moderately well, or even to exist at all." But in this matter these great authorities are somewhat in error, for gös abounded in an immense inlet of the Wenern, in my neighbourhood, where the water is not only comparatively shallow, but almost invariably so excessively turbid, that it was a miracle to me how the fish could manage to see the bait.

Though I myself cannot remember ever hearing the character of a wanderer attributed to the pike-perch, Boie would make him out to be somewhat discursive. "In the lakes of Holstein, the fishermen," he tells us, "have noted a periodical increase and decrease in their numbers. For several successive seasons they are abundant, and then for years together they become very scarce, or almost altogether disappear."

The pike-perch feeds chiefly on small fish, more especially Nors, or the fry of the smelt. It is said, indeed, by some, that he only inhabits waters where that fish is found. He also feeds on small fluviatile and marine animals, and when pressed by hunger—so we are told by Kröyer and Ekström—on vegetable substances. The pike, the perch, and other fish of prey, prefer greatly living on fresh baits; but the gös, on the contrary, is believed to have a special liking to such as are dead and tainted. In some places, indeed, the fishermen are accustomed to expose the small fish intended as bait for some hours

to the rays of the sun, that they may thereby acquire an odour prior to placing them on the hook.

By all accounts this fish is not tenacious of life. The fishermen in my neighbourhood asserted, indeed, that the so-called Is-Gös dies as soon as taken out of the water, oft-times even as soon as hooked, or enveloped in the folds of the net-a fact which by some was attributed to their excessive fatness; and this story is in a degree corroborated by Swedish and Danish naturalists. Kröver tells us, for example, "that the gös is not hard-lived-indeed, that its life is extinct soon after it leaves its native element;" and Ekström, "that when he finds himself a prisoner, and has made one or more efforts to escape, he resigns himself quietly to his fate, and one finds him floating belly upwards on the surface; as soon as he is captured he discharges the air from the swim-bladder, which occasions a noise resembling eructation. He commonly dies at the same instant. The fishermen are therefore accustomed, as soon as he is hauled into the boat, to pierce the tail near the caudal fin, that the blood may run freely, and the flesh in consequence be whiter and more palatable."

And when speaking of removing the gös from one country or locality to another, Ekström farther says: "By reason of his dying immediately after being taken out of the water, it is difficult to transport him if of any size; and it is equally so to transplant him by means of the roe, which can with difficulty be procured in the deep water where he spawns; and, taking it from a spawning female, although mixed with the milt of the male, which experiment I myself have tried on several occasions, very rarely succeeds. In the sump, or fishbox, he only lives a day or two." Kröyer, when alluding to this subject, testifies to a similar effect, and mentions "a dealer in fish who at different times attempted to convey the gös alive from Prussia to Copenhagen, but who always failed in the attempt."

Though the pike-perch is represented as so short-lived when taken out of the water, I do not think he dies quite so quickly as is commonly believed. I judge so from what has come under my personal notice, for those at whose capture I have assisted, have on the average lived an hour or more at

the bottom of the boat, in which at the time there was little or no water. Neither do I imagine the difficulty of obtaining mature eggs would be so great as described by Ekström; and I therefore hope the experiment will be tried in England, and that at no distant day the gös will be included in the British Fauna.

The flesh of this fish is white, firm, and very palatable. It is eaten dried, salted, or fresh. If the latter, it should be dressed (boiled, never fried) as soon as may be after it is caught, otherwise it soon becomes insipid. Though so delicious a fish, it is said, nevertheless, that if partaken of daily, one soon tires of it. In some parts of the country the fat is used by the peasants as an embrocation for the cure of rheumatism and sprains.

In the Wenern, the spawning season of the gös is April and May. Swedish and Danish naturalists tell us, however, that the process goes on up to the middle of June, and they attribute its long continuance to the circumstance of these fish only spawning in the night. Furthermore, that, at this time, the fish leave the deeps and approach the shoals, where the female deposits her roe amongst stones and weeds, "but never," they say (though this seems to me very doubtful), "in less than from sixteen to twenty feet of water." The eggs, which are light in colour, and very small in comparison with the size of the fish, are exceedingly numerous. Bloch, in a female of three pounds weight, found no less than three hundred and eighty thousand six hundred and forty.

The fry are of rapid growth. Ekström speaks of an individual of seven to eight inches in length, kept in a small piece of water, that he imagined to be about a year old, and which in the course of three years weighed from five to six pounds.

The gös attains to a large size in the Scandinavian waters. It has, to my knowledge, been occasionally killed in the Wenern exceeding twenty pounds weight; and we read of one taken in the Lake of Karsholm, in Scania, which weighed twenty-seven pounds. But monsters such as those are exceptions to the rule, the more usual weight of the adult fish being only about ten or twelve pounds.

The gös is captured in Sweden by devices of various kinds.

Near Ronnum great numbers were taken by nets, night lines, etc. At the neighbouring estate of Frugård, situated on an inlet of the Wenern, as much as sixty lispund, or about twelve hundred pounds, have been caught of a morning during the spawning season; and in the course of the whole season, five hundred lispund, or ten thousand pounds. As a consequence of this abundance, the town of Wenersborg was amply supplied with this fish. They were brought in cart-loads, and usually sold at one shilling the lispund, or about a halfpenny of our money per pound.

The Common Ruffe, or Pope (Acerina vulgaris, Cuv.), was abundant with us as well as over nearly the whole of Scandinavia. It is said to be more plentiful, however, in the northern and central portions of the peninsula, than in the more southern. It is also found in the eastern Skärgård, but, so far as I am aware, not in the western.

This fish, according to the Swedish naturalists, prefers slow running streams that are clear, and with bottoms of clay or sand; for though met with in such as have muddy bottoms, he does not seem to thrive. In the spring he seeks the shallows, but towards autumn falls back into the deeps, where he passes the winter. He keeps near the bottom, and is seldom seen even in mid-water. He is solitary in his habits; the greater part of the year he passes alone, and it is only during the spawning season that he is seen in shoals. disposition he is apparently sluggish, and seems rather to wait for his prey than to seek it. When he does move from his station, it is not by a continuous progressive motion, but by short and rapid shoots. It is not incapability, however, that causes this seeming apathy; for when alarmed, his movements in the water are so quick as to have given rise to the saying, "qvick som en gers,"—that is, agile as a ruffe.

He is in the highest degree voracious, and devours indifferently small fishes, insects, worms, and soft-bodied animals that are found attached to grass, stones, or other substances lying in the water. He seldom if ever attempts to capture anything that is at large, and in rapid motion. From this cause, when he sees the worm or other bait appended to the angler's hook stationary, he, without nibbling, as fishermen

would say, pounces upon it at once, and this more especially if it be lying at the bottom.

The ruffe is commonly in good condition, and the circumstance of his body being covered with a slimy matter, which exudes from the oval depressions about the head and the lateral line, makes him appear fat. If to this be added, that so soon as taken out of the water, he spreads his fins, opens his gills, and, as it were, inflates his body—"Han bröstar sig," as they say in Sweden; that is, he swells in the manner of a turkey-cock—one can well understand his nickname of "skatt-bonde," a term which is applied to a peasant who, from holding his land under the Crown on specially easy tenure, is, as compared with others of his station, unusually well off.

Owing to the slimy matter spoken of, this fish very often goes also by a designation which there is some difficulty in naming to ears polite, to wit, "Snor-gers,"—Snor implying the mucous excretion from the nasal organ.

The ruffe is very tenacious of life. It is said of him that, as with some of the *cyprini*, he can be kept alive a long time if frozen as soon as captured, and afterwards thawed in cold water.

Though the flesh of this fish is firm, white, palatable, and easy of digestion, it is but little in request with the upper classes in Sweden. But the peasants in some parts of the country value it highly, and call it "kungamat," or food for a king.

A great prejudice is entertained by the fishermen against the ruffe, in consequence of its being supposed not only to drive away other fish, but to devour their roe. The first charge is most likely altogether groundless, originating probably in the circumstance that when, owing to storms or bad weather, other fish retire from the strand to the deeps, the solitary ruffe remains, and becomes the only prize of the fisherman; but the second charge, though not fully proved, may possibly be true.

The ruffe spawns in April or May. The lek is carried on in moderately deep water, where the bottom consists of sand or clay, and is overgrown with rushes. Amongst these the female deposits her eggs, which are minute, yellowish in colour, and very numerous. Bloch counted no less than seventy-five thousand in one fish.

The ruffe is generally considered slow of growth. It never attains to any considerable size. One Swedish naturalist tells us, it has been met with as large as an ordinary perch; but this I take to be a mistake, for six to eight inches is their more usual length, which is seldom or never exceeded.

Owing to its tenacity of life, the ruffe is highly valued by the fishermen as bait; such, at least, was the case in my neighbourhood. From want of better, indeed, I have occasionally had recourse to it when "spinning" for trout or salmon, and have found it killing, especially after having rendered it more inviting by cutting off the spiny fins.

The Rough-tailed, or Three-spined Stickleback (Gasterosteus aculeatus, Linn.) was common in my vicinity; as also throughout Scandinavia, from the extreme south of Sweden, to far beyond the Polar Circle; and this as well in the waters of the interior as on the eastern and western coasts of the peninsula. It is frequently met with—indeed, in such small isolated places, that the double wonder is, in what manner it became an inhabitant there, and how it can continue to exist.

The three-spined stickleback prefers moderately rapid waters, and in the summer resorts much to the shallows, more especially to such as are exposed to the rays of the sun. Towards autumn, on the contrary, it retires further from the shore, and in the winter retreats to the deeps; such, at least, is the presumption, for when captured at that season in the fishermen's nets, it is usually in large numbers together. It is seldom seen singly, but almost always in larger or smaller shoals. It feeds on insects, worms, larvæ, small crustacea, and the minute fry of other fish; and although of so diminutive a size, is one of the most voracious of the finny tribe.

Perhaps the most remarkable circumstance in reference to this species of stickleback is the extraordinary changes observable in its colours. In the winter, the upper part of the head and the back is blue, and the body pure silvery-white. In the summer, on the contrary, the upper part of the head, and the whole of the back, down to the lateral line, is dark grey. During the spawning season, the variation in its hues are wonderful. The back then becomes brownish the crossbars darker, and the silvery-white sides acquire a strong argento-cupreous tint, implying a colour produced by the mixture of silver and copper. This is more especially the case with the females. The males are marked with a red spot under the chin, at the point where the gill membranes meet, and which extends rapidly, so that the redness commonly occupies the whole of the under surface of the body, from the point of the lower jaw to the vent. In different individuals, however, the redness in question occupies more or less space. With some it reaches above the lateral line; whilst others again are altogether red, with the exception of the upper part of the back, which is reddish brown, and the upper surface of the head, which is at all times of a strong verditer colour. The irides are of a beautiful green.

The spawning season with us is about the month of July; even as early as May, however, the males as well as the females begin to change their hues—a sure sign of its near approach; in point of fact, it actually commences as soon as the transformation in colour is fully effected. The lek itself is commonly held in some grassy spot near to the strand, and myriads assemble to take their part in it.

A somewhat marvellous account is given by Swedish and Danish naturalists as to the way in which the reproductive processes are carried on. The males and the females separate. The males, which would seem to be much fewer in number than the females, choose each for himself a certain spot, where he reigns paramount. Here, with fibres of grass and weeds, he constructs a tunnel-shaped nest, leaving only an opening in the roof for the admission of himself and the females; and to give this seraglio the greater stability, he strews the floor with grains of sand, which he often brings from a distance in his mouth; and in order that the fibres composing the upper part of the nest, may adhere the better together, he deposits secretions from his own body.

Desperate jealousies exist among the males; and in the guarding of these, their domestic sanctuaries, it requires but the very slightest provocation on the part of one to set up the

back of his neighbour, and to bring on a regular combat. On these occasions the belligerents dash at each other with the rapidity of an arrow, making the while, with their sharp lateral spines, a ferocious side-attack, which not unfrequently proves fatal; after which, and with similar speed, they retreat again to their own little fortress.

Whilst the males are thus engaged in these knightly exercises, the females, in larger or smaller numbers, make excursions, round and about the battle-field. One leads the shoal; she swims hastily forward, suddenly halts, and places herself in a perpendicular position, with her head downwards. The others having followed, collect about her, and station themselves, closely packed, in a similar attitude. When thus singularly congregated, she suddenly thrashes the water, as fishermen say, with her tail—a signal, it would seem, for departure—for in the twinkling of an eye the whole company disperse; and this is repeated many times.

During the temporary cessation of the combats spoken of, the male joins company with the females, when, as is usual with suitors, he assumes his gayest colours, which, in brilliancy and variety, equal those of the rainbow; and either by force or persuasion he gets one or other of them into his nest, through the aperture in question, where she deposits her eggs, and then forces her passage out again, but in an opposite direction to that by which she entered. Immediately after her departure, the male himself takes her place in the nest, for the purpose, it is to be presumed, of fructifying the eggs, and then goes wooing again, when the same process is repeated.

The number of eggs thus deposited in one nest is very great; and, after the spawning season is over, the male stations himself perpendicularly over the entrance of the nest, and guards the eggs until they are hatched. For twenty days subsequent to the birth of the fry, he tends them as affectionately as a hen does her chickens, and it is only by degrees he allows them to leave the nest, where he brings them food.

The lek usually lasts from four to six days, but its duration is in some degree dependent on the state of the weather.

Most fishes during the spawning season lay aside their natural shyness, and are consequently easy of capture; but the contrary is the case with the three-spined stickleback, which at that period is more than usually vigilant. When the lek is over, its brilliant colours gradually vanish, and it then assumes its ordinary appearance and disposition.

From its abundance everywhere during certain seasons, one might be led to imagine the female to be very prolific. But this is by no means the case, for she has not in both ovaria more than from one hundred and ten to one hundred and fifty eggs, which are large in proportion to the size of the fish; and as from the limited number of the males, there is reason to believe that only a certain number of these are impregnated, her fecundity cannot be great. The growth of the fry is rapid; but northern naturalists doubt the truth of the story as to the fish living for only three years. In the interior waters of Scandinavia, it seldom exceeds three inches in length, but on the coast it is often met with an inch longer.

## CHAPTER III.

The Yellow Bream—Found all over Scandinavia—Resorts—
Characteristics—Spawning—Size—Capture—The Ide—
Habits—Spawning—Size—Capture—The Pike—Its
Abundance—Curious Spawning Habits—Large Size—
Abstinence—Voracious—Anecdotes—The Osprey and the
Pike—The Egle and the Pike—Strength.

THE Yellow Bream (C. Brama, Linn.) was abundant with us, as well in the Wenern as the Gotha. We saw but little of it in the river, however, in consequence of its keeping to the still deep pools, to which we had not often occasion to resort. This fish is found in almost all the larger of the Scandinavian waters, from Scania to near the Polar Circle, but most plentifully in the more central and southern parts of the peninsula. It is also an inhabitant of the eastern Skärgård;

but those in salt water are neither so large nor so fat as those in fresh water.

The yellow bream, as with several others of the Cyprini, undergo great changes of colour and form, determined by the season of the year, and the nature of the water. The variation is at times so great as to cause some ichthyologists to doubt whether they are separate species or not. The younger ones are always less deep in colour in proportion to the length of the body than the older ones, and have a more slender shape and at this age, therefore, the fishermen frequently confound them with others of the bream tribe.

The favourite summer haunts of the yellow bream are clear and moderately deep water, with a grassy bottom, especially where the *Isoètes lacustris*, Linn., grows, which he roots up with his snout, as a swine does; which grass-like plant, when seen floating on the surface, gives information of the track he has pursued, and of his then whereabouts. Hence braxengräs, or bream-grass, is the name by which the plant in question commonly goes in Sweden. But as the season advances, this fish retires to the deeps, where he selects for himself quarters for the winter, and here, close packed together, he remains during that inclement season. Such places, generally known to the fishermen, are called braxen-stand, or breamstands.

The yellow bream is a cautious, cunning, and extremely shy fish. He is seldom met with alone, but almost invariably in smaller or larger shoals. Loud noises, such as thunder, the ringing of bells, shots, and the like, always send him to the bottom, whence, after such an alarm, he does not return for several days.

He is very tenacious of life, and if packed in wet grass can be transported a great distance.

We in England set little value on the bream, considering the flesh as "bony and insipid;" but the Northmen say we are somewhat wrong in this matter, for though they admit the bony part of the allegation, they aver that the flesh is exceedingly palatable when the fish is of a good size. They acknowledge, however, that the fat with which it abounds, and on which its flavour mainly depends, renders it rather indigestible. It is eaten fresh, salted, and smoked; with the wealthier classes it is commonly brought to table *inlagd*, that is cold, and in its own gelatine, and served up with vinegar and pepper, when to my taste it is no despicable dish. The head and tongue, when thus prepared, are in especial esteem.

In my vicinity the spawning season with the yellow bream is about the end of May or beginning of June; and as it occurs just at the time that the juniper and the bird-cherry-tree blossom, the fisherman regulates his movements accordingly. The resorts of the fish at this period are muddy-bottomed strands, overgrown with grass. When such places are not to be met with in lakes, they are sought for in larger rivers; and in this case they always select some grassy bend or cove, at the side of the stream. The first shoal that arrives at the spawning-ground, which is never changed, but year after year is the same, consists altogether of males. Afterwards the females join company, when the lek commences.

The spawning, which would seem to go on more especially during the silence of the night, is attended with considerable noise, caused by the fish, who move to and fro in close phalanx, constantly thrashing the surface of the water with their tails. The female deposits the roe on rushes, against which she rubs herself, to facilitate their deposition. The period of the lek is more or less regulated by the state of the weather, usually continuing from three to four days. When the older fish have retired from the spawning-ground, the younger take their places.

The yellow bream is very prolific: in a fish of eight pounds weight, one hundred and thirty-seven thousand eggs have been found. They are hatched in about three weeks, and the fry are said to grow quickly.

Swedish naturalists tell us the bream attains a weight of eleven pounds. I never heard of larger in the Wenern; but the Chamberlain, G. A. Schmiterlöw, informs me that in the Lake Emmaren, in Ostergothland, he has seen bream captured weighing eighteen pounds, and so exceedingly fat, as to render it needful, before preparing them for the table, to place them in a sump, or fish-box, for three or four weeks,

that they may be, so to say, sweated down. And I am the less inclined to question the former part of this statement, because it was corroborated by the Count Corfits Beckfriis, one of the largest landed proprietors in Sweden, who assured me, when on a visit to him in Scania, that he had weighed and eaten of one of fifteen pounds, and knew of another captured in his neighbourhood that weighed eighteen pounds. Bream of twelve to thirteen pounds, the Count told me, were not at all uncommon in that part of the country.

The quantity of bream that are taken in certain parts of Sweden by one device or another, and this as well during winter as summer, is very considerable. In the year 1848-9, a neighbour of mine captured two hundred lispund, or four thousand pounds weight, of that fish in the Wenern, but this is nothing compared with what has been done elsewhere.

As for instance, at the celebrated bream-stand, called Hakvarpet, in the Hallbosiön, a lake in Sudermanland, and at about twelve English miles from the town of Nyköping. The exclusive right of fishing this particular stand is vested in the governor of the province, of whose salary, indeed, this privilege forms a part. The right, however, is seldom exercised more than once within the year, and that in February or March; and from its being looked upon as a kind of event, thousands of the inhabitants of the surrounding country flock to the spot on the appointed day. The fish are taken in a drag net of immense size, which is drawn under the ice in much the same manner as described in my former work. From the length of time, however, that the operation lasts, only a single cast is made in the course of the day; but this cast is very remunerative, producing on the average from ten thousand to forty thousand pounds weight of bream and other fish! An eye-witness assures me, indeed, that in 1846 or 1847, he himself was present when no less than thirty thousand pounds weight were thus captured. A sort of fair is held on the ice itself, where the fish are disposed of in lots to the best bidders, on which occasion, as may well be supposed, the usual appearances of utile cum dulci do not fail to be seen.

In connection with this subject, a somewhat curious circumstance was related to me by M. Schmiterlöw: "Although,"

said that gentleman, "the bream is very abundant in the districts bordering upon the Härad of Ydre in Ostergothland, where in former times that fish was also numerous, not one is now to be found. Their absence is looked upon by the peasants as a judgment for the misdeeds of a former clergyman of theirs, who having on one occasion lost his net, proclaimed from the pulpit that it was stolen, thereby bringing scandal on his congregation. The missing net, however, was afterwards found filled with decomposed bream in another part of the water, where it had been carried by a heavy storm which arose during their lek."

The Ide (C. Idus, Linn). This fish, which though included by Yarrel and other authorities in our Fauna, is hardly known in England, was very plentiful indeed with us in the Gotha and the Wenern, as also throughout Scandinavia generally; and there are few of the waters of any magnitude, from Scania to Lapland, of which it is not an inhabitant. It is found likewise in the eastern Skärgård; but I have my doubts whether it attains to so large a size in salt as in fresh water.

During the summer months the favourite resorts of the adult ide are deep pools with stony bottoms, where, upon fine and calm evenings, one may see them swimming near the surface. The young, on the contrary, resort more generally at this season to grassy shallows.

The ide lives chiefly on aquatic plants, insects, and their larvæ; but it feeds at times on small fish, as is evidenced by their frequently taking the bait, when one is spinning, to which fact I myself can testify.

As with others of the *Cyprini* this fish is tenacious of life, and will exist long after removal from its native element. In the *sump*, or fish-box, it will live for a length of time, more especially if the same be placed in clear and slowly running water.

The ide not unfrequently finds a place at the table of the higher classes, and when properly prepared makes a very palatable dish. As with the bream, it is eaten fresh and salted, smoked and *inlagd*, that is, served up cold, as mentioned, in its own gelatine, with vinegar and pepper.

In my vicinity the spawning season of the ide was usually about the end of April or beginning of May, the precise time depending, in degree at least, on the breaking up of the ice. The lek is commonly held in grassy shallows, in the bend of a river or brook; or it may be in a flooded morass, to which access is only obtainable by means of a very confined passage. In these their journeys from the deeps, where they have passed the winter, the ide displays much intelligence as well as strength, and well knows how to avoid the devices contrived by the fisherman for his destruction.

Like the salmon, he will leap over stones, trees, and lesser falls; and when the water is so low as to bar his farther progress, he will throw himself on his side, and in this position force himself forward. When he meets with such impediments, he usually remains stationary for a time, as if to consult within himself as to the best course to be pursued. In the meanwhile he is joined by several of his comrades, and when one of the number has taken courage and made a start, the rest on the instant follow in his wake. In this manner the fish work their way up the stream until a suitable spot for their purpose is reached.

The first shoal—for on these occasions they are congregated in vast numbers—that starts for the spawning-ground consists wholly of males. Some few days subsequently, though commonly not until the weather is mild and clear, the females join company, when the lek commences. During its continuance the fish are packed closely together, and lash the surface with their tails, whence arises a peculiar kind of noise. This, however, is not continuous, but quick and short, and is renewed at intervals.

The lek usually lasts for three consecutive days and nights—that is, unless a cold north wind, rain, or storm occurs, in which case matters are postponed until the weather becomes more propitious. In the month of April, Bloch found in an individual of three pounds weight sixty-seven thousand six hundred small yellow eggs of the size of poppy seeds. When the lek is over, both the sexes, in company, return the way they came.

The roe is deposited amongst grass and sticks, and from

fourteen to thirty days afterwards, the time varying according to the temperature, the fry make their appearance. Provided the water does not recede, they remain on or about the spawning-ground until the end of August, by which time they are about two inches in length, when they descend the stream in innumerable shoals for deeper water. Afterwards they appear to separate, and live more apart.

The ide is said to be of rapid growth, and, according to Gmelin and Lacepède, able to propagate at the age of three years.

Swedish naturalists tell us that the ide never exceeds five to six pounds in weight; but this is somewhat under the mark, for in my own immediate neighbourhood they have occasionally been taken of seven pounds; and a friend of mine, resident on the Wenern, assures me they have with him attained to eight, and even ten pounds weight.

The ide is captured in a variety of ways: by the rod and line, nets, and sundry devices, chiefly however whilst spawning. Once, to my shame, I took part in a chasse when the fish were thus employed. It was in the night-time, and by torch-light. Having first ascertained the whereabouts of the lek, we drew a net across the stream somewhat below them, and then attacking the fish from above with spears, we drove them towards the toils. As it was, we killed a good many—one hundred and ten, I believe—but had our arrangements been good, which was far from the case, the slaughter would have been much greater, and very few would have escaped us.

The Pike (Esox Lucius, Linn.) was abundant with us as well in the Gotha as in the Wenern. It is common also throughout nearly the whole of Scandinavia, from Scania to to Lapland. We read, indeed, of its being found in the lakes and tarns of that wild country beyond the limits of arboreal vegetation, or at least of the birch-tree. It is likewise plentiful in the eastern Skärgård. But that salt water is not its proper element, may be inferred from the fact, that these fish diminish both in size and number in proportion as they approach the open sea, where they are no longer to be found.

In my vicinity, the spawning season of the pike was in

April and May. The lek is usually held in shallow water, with a weedy and muddy bottom, or it may be in a flooded meadow. It lasts for a considerable time, from the circumstance of there being two to three separate leks. Contrary to the usual habit of fishes, the young pike always lek first, then the middle-aged, and lastly, the older and larger fish.

There is a tradition among fishermen in the midland provinces of Sweden, which has been handed down from time immemorial, and which is still believed, that on St. Gregory's Day, the 12th of March, the pike first turns his head towards the shore; and that on St. Gertrude's, the 17th of the same month, he leaves the deeps where he has passed the winter, and makes his approach towards the land. The first lek takes place before the ice is fully gone, and the fish engaged in it are in consequence called Gertrude, or ice-pike. When this first lek is over, by which time the ice has disappeared, the second lek begins; and as it occurs just at the time that frogs (Rana temporaria, Linn., called by the country people Glossor) are pairing, the fish taking part in it are designated Gloss, or frog-pike. The third and last portion, or those which appear on the spawning-ground after all the others have moved off, and when the trees are in leaf, or partially so. bear the appellation of Blomster, or blossom-pike.

The proceedings of this fish at the lek are by all accounts somewhat curious. The female (always larger than the male) first makes her appearance, and is followed by two to three, and occasionally by four males. She takes to such very shallow water, that when calm, a ripple caused by her movement may be observed on the surface. Sometimes indeed her back-fin, or tail, is seen above it. As soon as she becomes stationary, the males approach and surround her, one on each side; and if there are more than two in company, one stations himself under her tail, and the other above her back. rub themselves against the body of the female, who in the meantime remains passive, only moving her fins. After a while she makes a plunge, separates herself from the males. and shoots forward to another spot, where the same proceeding is re-enacted. During this time she deposits amongst the grass her yellowish and somewhat large roe, which is impregnated by the milt of the males. From a pike of six pounds weight, one hundred and thirty-six thousand eggs have been taken, which number, however, on the average does not exceed that of other fishes. The eggs are hatched after a period of from twenty-five to thirty days, and the growth of the fry is rapid.

Pike of a very considerable size were very often met with in my vicinity. The largest caught by myself, however, did not exceed seventeen pounds in weight; but more than one fish of twenty-five pounds weight was captured by my people. During my stay in Sweden, I never heard of any weighing more than fifty pounds, and these were caught in the Wenern, a fact which, considering the great size of some of the lakes, and knowing that heavier fish have been met with in Britain, That monsters, however, do exist in the surprised me. Scandinavian waters, I have no doubt. A fisherman at Frugård assured me, for instance, that in 1848 he had a pike on his night-line, which certainly was four feet in length, and could not have weighed less than eighty pounds. several times he had the fish up to the gunwale of the punt, but owing to the line getting entangled, it at length broke its hold and escaped. Another peasant affirmed to me that, when on one occasion he was spearing fish by torch-light, he fell in with so immense a pike, resembling, as he said, the trunk of a tree, that he was actually afraid to attack it. Though there may be exaggeration, there is probably much truth in these and similar relations, of which hundreds are in circulation.

A notion prevails in Sweden, that at certain times the pike, from the peculiar state of its gums, is incapable of feeding in its usual mode, if even at all. Since that work appeared, M. Ekström has favoured us with some remarks on the subject, the substance of which may not be without interest to the naturalist.

Fishermen, in general, he tells us, believe that the pike at certain periods is altogether disinclined att taga svalg, that is, to gorge the bait; and that at others, on the contrary, he is more than usually voracious. These periods occur regularly, so that an observant person is thus enabled to foretell when the fish is, as the saying goes, i taget, or in taking humour.

But the periods in question are not supposed to occur at the same time every year; and it is said to have been noticed that they are dependent on the termination of the spawning season; for in the particular change of the moon, whether new or full, in which this ceases, in that same change the pike will not taga svalg, or gorge the bait. To this rule, however, the Rōt-mānad—nearly answering in point of time to our "dog-days"—is an exception, for he is then at all times i taget. The cause of these periodical fits of abstinence in the pike are ascribed to the circumstance of its gums then becoming so swollen, that the teeth hardly protrude beyond them, and consequently the tenderness of his mouth places bounds to his usual rapacity.

Another singularity in this fish is, according to Ekström, that even when he has swallowed his prey, he, by the simple construction of his stomach, can disgorge it at pleasure, a fact with which every one may not be acquainted.

That the pike is a very voracious fish every one knows, but that he should carry his gluttonous propensities to the extent described by my friend, M. Wærn, is perhaps new to readers in general.

"I have kept pike and trout," that gentleman tells us, "in a pond that was supplied with running water. the most part remained stationary, but the trout, on the contrary, were in constant motion. On a particular occasion, I saw a pike of from seven to eight pounds weight make a dash at a trout of fully equal size to itself, and seize it across the body with his sharp teeth. The combat was lively. assailed trout made desperate though ineffectual efforts to get rid of its ravenous enemy. After the lapse of a couple of hours, the trout became altogether exhausted, on which the pike, beginning with the head, commenced gorging his prey. The meal lasted three whole days, or rather, it was not until the expiration of that time, that the pike had succeeded in swallowing the whole body. The process of digestion must have continued very much longer, as for a week afterwards the fish had a very swollen appearance, and was hardly able to move from the spot even when poked with a stick."

Baron C. J. Cederström was also eye-witness to extraordinary

voracity in the pike. After relating the results of some experiments made with the young of more than one species of fish, he says:

"On the 12th June, after the larger portion of the fry were preserved in spirits, there remained four young pike-namely, two of about twenty, and two of some twenty-six millimetres in length. That I might be the better enabled the next day to witness the amusing spectacle afforded by their gluttony, they were left without food, and a covering was, as usual, placed for the night over the vessel in which they were kept. o'clock on the following morning, when I removed the covering, they were all there; but one quarter of an hour afterwards, when I again inspected their place of confinement, one of the larger of them had swallowed its somewhat smaller comrade, or rather, it had partially gorged it; for the half of the body, which moved for a second or two, still protruded beyond the jaws of the assailant, who was shapeless, and obliquely distended. In the highest degree astonished at what had happened, which previously I had considered impossible, I remained perfectly quiet for a time, and in the course of a few minutes saw the manner in which the remaining two cautiously watched each other, and waited for an opportunity of making an onset. The larger presently made a charge at the smaller one, which the latter avoided by its dexterity, and then only retired for a short distance. A second attempt, however, made shortly afterwards, succeeded perfectly well. The two victors, who had preved on their brethren, then paraded separately about the vessel, gorged to bursting with their copious meal. In the course of a couple of hours the exposed tails of their swallowed companions had disappeared."

The Sea-eagle and the Osprey not unfrequently pounce down upon a fish when basking near the surface of the water; if too heavy for them to bear aloft, it not unfrequently happens that, unable to extricate their claws, they are carried under water and drowned.

The Rev. M. Möller, rector of the parish of Mellby, in West-gothland, informed me that, one misty morning, when he was engaged in taking up a night-line, he heard at a little distance

a very great disturbance in the water; on rowing to the spot, he found to his surprise that it arose from a combat between an eagle and an immense pike, for the bird, which had made a stoop on to the fish, was neither able to disengage its talons, nor to bear the fish aloft. The clergyman had no gun unfortunately, but seizing hold of a stout stake, he was about to deal a death-blow to the belligerents, when by a desperate effort, the pike not only managed to clear himself from the hook to which he was attached, but to dive to the bottom, bearing his feathered antagonist on his back, and neither the one nor the other of them were ever more seen by the reverend gentleman.

Magnus, the Trollhattan fisherman, was a witness, he himself assured me, to a similar scene.

An osprey had pounced upon an enormous pike, which, from its great weight, it was unable to bear aloft, and from which it was unable to extricate its talons. At times both the fish and the bird struggled together on the surface, whilst at others the pike fairly carried the osprey under water, the bird, on its reappearance, uttering the most plaintive cries Being in a boat, and provided with a fish-spear, he lost no time in giving chase, in the hope of capturing one or both; but before reaching the spot the pike, to his great disappointment, so completely gained the upper hand, as to carry the osprey with him bodily under water.

On the occasion of these conflicts, it, however, at times happens that the strength of the belligerents is so equally matched, that neither party can claim the victory, and the battle ends by the death of both.

"An inlet, called Morviken, of Norra Dalsjön, in the province of Helsingland," so we lately read in the public journals, "was recently the theatre of the following occurrence:

"The most powerful plunderer of the air, the eagle, pounced upon the most powerful plunderer of the water, the pike. The former, however, had so badly calculated his strength, that the attempt was a failure. The fish was stronger than the bird, so that the latter was near being drawn under water, and of becoming himself a poor prisoner in the liquid kingdom of the fishes. He was neither able to fly away with the

heavy pike, nor to release himself, his talons being too deeply embedded in the body of his intended prey. Giving utterance to the most dismal cries, king eagle floated with outspread wings on the surface, a pitiable living wreck. Nevertheless, no one of his subjects in the air came to his assistance. A man, however, standing on the shore, who had witnessed the scene, hurriedly launched his skiff, rowed to the place of conflict, and with determined will and strength of arm plunged his fish-spear into the eagle's breast, thus capturing both him and his intended booty.

"The eagle, nailed up in front of a stable door, near to Morvik Foundry, is still to be seen; but the pike, which weighed fifteen pounds, supplied a good meal to the family of the bold fisherman, instead of being borne off to the eyrie of the royal bird."

It is farther stated, as not of unfrequent occurrence, for the pike to be found, not only dead, but *living*, with the skeleton of the eagle or the osprey still attached to its back. This story has not, I fear, found much credence in England; so at least it is to be inferred from the notes of admiration attached to it when quoted by the late talented author of "Wild Sports of the West," a work which, to my regret, has only very recently come under my notice. That it is a true tale, however, I myself doubt not, and I subjoin statements furnished to me by friends and others, which will go far, I imagine, to set all doubt upon the point at rest.

"The strength he possesses," says M. Ekström, when speaking of the pike, "is not inconsiderable. On the back of one of these fish, not exceeding twenty pounds in weight, I myself have found the skeleton of an osprey (Falco Haliætus, Linn.), which he had drawn under the water and suffocated."

The Rev. M. Möller informed me, moreover, that he himself on one occasion had taken a moderately large pike, with the skeleton of a kite, or large hawk, still attached to it.

"Again, in the Lake Wettern, in Eastgothland, as also in that of Ringsjön in Scania," so said Dr. Willman, "pike have been caught with the skeleton of an eagle on their backs. The one taken in the Wettern had for a number of years exhibited the skeleton above the surface of the water; and

the fishermen, who believed it to be the harbinger of misfortune, always, when aware of it, made for the shore as quickly as possible. The flesh having rotted away from the bones, the skeleton had assumed a greenish hue, probably in consequence of some algæ, or the like, with which it was overgrown, causing it at a distance to resemble a bush."

"My brother, Captain Axel Westfeldt, Lieutenant J. Lekander, and the fisherman Modin," writes a friend, on whose word I place every reliance, "were one day fishing with Langref, that is a line of great length, with several hundred hooks attached-of which more presently-in a large lake in Fryksdal, in Wermeland. When they had proceeded a considerable distance from the land, Modin suddenly pulled the boat right round, and in evident alarm commenced rowing with all his might towards the shore. One of the party asked the man what he meant by this strange conduct. 'The Sjö-troll, or water-sprite, is here again,' replied he, at the same time pointing with his finger far to seaward. Every one in the boat then saw in the distance something greatly resembling the horns of an elk, or a rein-deer, progressing rapidly on the surface of the water. 'Row towards it,' exclaimed Lekander; 'the deuce take me if I don't give the Sjö-troll a shot; I am not afraid of it.' It was with great difficulty, however, that Modin could be prevailed upon once more to alter the course of the boat, and to make for the apparition. But at length the man's fears were partially allayed, and the chase commenced in good earnest. When they had neared the object sufficiently, Lekander, who was standing, gun in hand, in the bow of the boat, fired, and fortunately with deadly effect. On taking possession of the prize, it was found to be a huge pike, to whose back the skeleton of an eagle was attached. This fish, or rather the bones of the bird, had been seen by numbers for several years together, and universally went under the above designation of Sjö-troll.

## CHAPTER IV.

The Sly Silurus—One of the largest of Fresh Water Fishes—
Appearance—Sensitive to Tempests—Voracious—Size—
Strength—The Burbot—Habits—Size—Highly Esteemed
for the Table—Spawning—The Eel—Number of Species
— Sensitiveness — Habits—Propagation — Size — Other
inferior Fishes.

THE Sly Silurus (Silurus Glanis, Linn.), one of the largest of fresh-water fishes, though not to my knowledge found in the Wenern, is pretty common in several of the lakes in the midland and more southern parts of the Scandinavian peninsula. Formerly it existed also in one or more of the Danish lakes, where it is supposed to have been introduced by the monks, but where it is now believed to be extinct. It is common in several European countries, and though properly a fresh-water fish, has been captured at times in brackish, if not in salt water.

Through the indefatigable exertions of Mr. George D. Berney, of Morton, Norfolk, the silurus was last year (1853) introduced into England, and consequently is now included in our Fauna; therefore a passing notice of this fish may not be unacceptable.

The silurus, which is not altogether dissimilar in appearance to the burbot, is said to be slow in his movements, and inert in disposition. For the most part he lurks in holes, or under fallen timber, etc., at the bottom; and would rather seem to lie in ambush for his prey than to seek it. "The structure of his body is such," Bloch tells us, "that other fishes approach him without being aware of his presence. He is of a dull colour, and has no brilliant scales to betray him, from which cause he is hardly to be distinguished from the mud itself."

During tempests and thunder-storms, the silurus evinces great inquietude, and quits the deeps. It is said, indeed, that it is only on such occasions the larger individuals are captured. According to Holm, who flourished about the year 1777, he keeps to the deeps until April, when he approaches the shoals,

and in the beginning of August retires again to his usual haunts. "During warm summer-days," Holm further tells us, "this fish is often seen near to the surface, particularly during drizzling rain. If the sun be powerful, he is said to conceal himself, more especially his head, under aquatic plants, or amongst reeds and rushes, and at such times to be more than usually sluggish (the female more so than the male), so that he can then be readily captured. The silurus is rarely found alone; but more than three or four, and those of about the same size, are nevertheless seldom seen together; and when thus congregated, they seek their prey in company."

The long barbules with which the mouth of this fish is provided, are in perpetual motion, and although they can be directed at pleasure on either side, or downwards, are generally inclined backwards. Kröyer imagines "these barbules, which are provided with a large nerve, serve the fish as organs of touch when searching for worms and other food in the mud at the bottom, and perhaps also to give him intimation of the approach of his prey." But Bloch, on the contrary, tells us, "that in his opinion they are for the purpose of attracting other fishes; for when he plays them about, the fish take them for blades of grass, and when his dupes approach within reach, he pounces on them."

The silurus is a very voracious fish, and not only devours other fishes, even those the best armed (as, for instance, the pike and the perch), but aquatic birds. He feeds also on carrion, as is proved by his taking the hook when baited with tainted fish or meat; and (though perhaps unjustly) is charged with attacking the human species. Aldrovand speaks of a silurus near to Presburg, that devoured a child who was bathing, and says that the fish was captured shortly afterwards, when the remains were found in his stomach. The more probable solution of the story, however, is, that the poor child was first drowned, and that the silurus subsequently preyed upon its body.

Opinions seem divided as to the value of the silurus as food. Pontoppidan calls it a *Herre Fisk*, which may be rendered: "a fish fit for a gentleman;" and Holm remarks, "that in consequence of its scarcity, it is reserved exclusively for the

royal table." "But," he adds, that "the flesh, in the opinion of himself and some others, is not very palatable; as also, that in consequence of its oily nature it cannot be considered as wholesome or 'digestible." The flesh is white, soft, and luscious, and although very inferior to it, more resembles that of the eel than any other fish. In some places the fat is used instead of lard. Isinglass is prepared from its swim-bladder.

The silurus, as is the case with other fish that live at the bottom, is very tenacious of life, and will survive long after being taken out of the water if placed in wet grass.

It spawns about midsummer, amongst reeds. Bloch tells us he has found seventeen thousand three hundred small greenish-coloured eggs in a fish of three pounds weight, and that the fry appear even as early as from the sixth to the ninth day. The young are of slow growth. The old story of the male guarding the female, and the young afterwards, seems now exploded.

The silurus attains to eight feet or upwards in length. Richter speaks of one captured near to Limritz, in Pomerania, which had a mouth so large, that it could easily have taken in a child of six to seven years old; and that he himself has seen one lying on a charette or kind of cart, that was longer than the vehicle itself! According to Kramer, they are found in the Danube, weighing more than three hundred pounds, with a girth that two men cannot span. Bloch tells us, indeed, that in 1761, an individual was taken at Writzen, on the Oder, of which the salted flesh alone filled two barrels and a half, each barrel ordinarily weighing three hundred pounds; so that this fish, sinking the head, entrails and fins, must therefore have weighed seven hundred and fifty pounds!

The strength of the silurus, which lies chiefly in its tail, is so great, that a blow of it has been known to upset a small fishing-boat.

This fish is believed to attain to one hundred years or upwards. Its enormous size, and slow growth, make this very probable, but certain proofs of the fact are wanting.

The young silurus takes the hook freely when baited with insects, and when in confinement may be fed either on fish or vegetable matter.

The Burbot (Lota vulgaris, Cuv.) is very abundant both in the Wenern and the Gotha. It is also found throughout nearly the whole of Scandinavia, from Scania northward to far beyond the Polar Circle. According to Kröyer, indeed, it is met with in the mountain lakes close to Alten, which is near to the North Cape itself. Of parts of the eastern Skärgård, where the water is less salt, it is likewise an inhabitant. In Denmark it is scarce. Kröyer makes mention of a burbot exhibited for money in Copenhagen no later than 1838. The advertisement ran thus, "By the royal permission is now to be seen a living and rare fish, called in Sweden, Lake." According to the Swedish naturalists, it is the only one of the Gadus family that lives in fresh water. There are few fish that have bodies so flexible, or whose movements are so serpentine or eel-like.

Though the burbot is found in lakes and rivers with clayey bottoms, it seems to prefer those that are stony. It is a somewhat solitary fish, and excepting during the spawning season, does not congregate in shoals. It is never seen near the surface, and except at the setting in of the winter, when it approaches the strand, always keeps to and swims near the bottom (hence its Lappish name Njaka, or the creeper), where it hides itself amongst stones, sunken trees, etc., in readiness to pounce on its prey. Though apparently slow in its motions, it can, at will, swim with considerable quickness, as is evidenced by its capability of seizing other fish. Its habits appear to be roaming. M. Göbel speaks of an individual in the Wenern having travelled some fourteen English miles in the course of a single night, a fact, attested by its retaining, when taken, the hook it had previously carried off.

The burbot is a great glutton, devouring almost everything that comes in his way, whether living or in a state of decomposition. But for the most part he seems to subsist on small fish and insects. He is said to visit the spawning-grounds of other fish, to feed on their roe; occasionally, however, he makes a meal of larger fish.

"A burbot of twenty-three inches in length that I opened in the month of December," writes M. Ekström, "was found to have gorged a pike twelve inches long. The head of the latter, which lay bent at the bottom of the greatly distended stomach of its devourer was, with the exception of the teeth, nearly dissolved; whilst the tail, which was much torn, stuck out from between its jaws. It seems almost incredible that the pike, before its suffocation, had not ruptured the stomach of its assailant."

The burbot is very tenacious of life, and lives very long after being taken out of the water, and that without the skin drying up, which seemingly depends on the abundance of his slimy secretions. Fishermen, to kill him, are accustomed to sever the  $G\bar{a}l$ - $n\bar{a}s$ , or the flap of the gill. This is done in consequence of the popular notion that he would otherwise devour his own liver, which in Sweden is looked upon as the most dainty part of the fish.

None of the Scandinavian fishes are held in higher estimation for the table. But perhaps it is to the savoury sauces with which it is usually served up, that its great reputation is mainly attributable. The flesh is white, firm, and boneless, and the liver is considered an especial luxury. The old story as to the roe being unwholesome, is at the present day looked upon as a fable, and vast quantities are now annually consumed in Sweden. Very good caviare is also prepared from it.

But it is not for the table alone that this fish is valuable. Certain portions of its body, as with the Ostiacks, are used by the common people for medicinal purposes. The oil, which flows spontaneously from the liver, is converted into eye-salve; and the coccal intestines are dried and pulverised, a teaspoonful of which is taken at intervals as a preventive for the ague. The skin, again, when recently taken off, is wrapped round fractured glass vessels, to which, when dry, it firmly adheres, and renders them water-tight. When well rubbed with fat or oil, it is partially transparent, and in some countries is used in lieu of window-glass. Of the swim-bladder, or sound, isinglass is made.

With us the burbot spawned about Christmas, or a little later. Swedish naturalists assign the month of March as the spawning season in the Wenern, but in this there must be some mistake. The place where the lek is held, called *Lak-às*, or burbot-bank, has usually a sandy bottom. From the small

size and great number of the eggs, the fecundity of this fish would appear to be considerable. It is on record, that one hundred and seventy-eight thousand eggs have been found in the body of one female. The young are said to appear within a few weeks of the deposit of the roe, and to be in their third year capable of procreation.

The burbot attains to a very considerable size in Scandinavia. Swedish and Danish naturalists assume eleven pounds as its maximum weight. Pallas affirms that it grows to the length of two feet. In the Wenern, as also in the large lakes in Wermeland, it is, to my knowledge, occasionally taken of twenty pounds weight. The Kållandso fishermen assure me, indeed—and I am inclined to believe their statement—that though they themselves never captured a burbot much exceeding twenty pounds, they on a particular occasion saw one in the Lidköping market that weighed thirty pounds. It was so large and so forbidding in appearance, they said, that no person would buy it.

The devices adopted in Sweden for the capture of the burbot are very numerous, but in general very simple in their nature, as the fish is by no means cunning. Of the various contrivances, one, called att- $d\ddot{o}fva$ , or to stun the fish, may be mentioned here. The operation is effected in this manner:

At the commencement of the winter, and a little prior to the spawning season, the burbot frequently seeks the shallows. When, therefore, the water becomes slightly frozen over, the fisherman, armed only with an axe, proceeds slowly and cautiously along the newly-formed covering; and as soon as he observes the fish lying beneath, he strikes the thin ice immediately above its head a heavy blow with the back part of the axe, which has the effect of stupifying it for a time, when he draws it out through an aperture cut in the ice.

The Eel is common both in the Gotha and the Wenern. Singularly enough, however, this fish was unknown in my neighbourhood until about fifty years ago, owing as supposed to the Falls of Trollhättan impeding their progress from the sea. But when sluices were formed at that place, and a traversible communication opened, the eels immediately appeared

in the waters above. An old and experienced fisherman, residing on the banks of the Wenern, assured me, indeed, that it was during his own childhood that the advent of the fish first took place. With the exception of the far north, the eel is common, I believe, throughout the Scandinavian peninsula.

Swedish and Danish naturalists seem not quite agreed as to the number of species of this fish that exist in Scandinavia. Nilsson speaks of two fresh-water eels, and Kröyer of an equal number or more, but as yet he has not concluded the subject. In my neighbourhood there were certainly two species; the one was called by the fishermen the Elf-Ål, or river-eel, which had a broad nose and prominent teeth, and answered probably to the Anguilla latirostris, Yarr.; and the Nābb-Ål, or sharp-nosed eel, whose teeth were less prominent, which was most likely the A. acutirostris of Yarrell. Unfortunately, however, I did not bring specimens to England for their proper identification.

The eel feeds chiefly during the night. In the day-time, he lies embedded in the mud, where he forms for himself a lair, from which there are several outlets. The whole winter, from the end of November to the beginning of April, they hibernate in the mud, not unfrequently, it is said, at a depth of three feet, and apparently in groups. I judge so from seeing fishermen, after discovering their whereabouts, impale them one after the other with a long and slender spear called Ål-gel, almost as fast as the weapon can be got to the bottom.

Naturalists do not agree as to some of the habits of the eel. Ekström's remarks on this subject are deserving of attention.

"It has been the belief," he tells us, "that during the spring, when its wanderings commence, it betakes itself to rivers and streams, the course of which it follows to the sea. But this is a palpable mistake. It is true that the eel at that season seeks rivers, but arrived there, it goes just as often against as with the current. That the eel should only follow the stream is probably affirmed, because, in all large eel-fisheries, the opening of the trap faces the stream, by which the fish allows itself to be borne forward in the same manner

as the bream by storms. In this vicinity the eel is often captured in traps, whose openings are placed with the current. I believe that the eel seeks rivers early in the spring, because after its long winter sleep, it there finds a greater abundance of food; and that as the spawning season approaches, it allows itself to be carried by the stream to the lake where the lek is held."

The eel is afraid of noises. Of thunder he has great dread, and during its continuance is always in motion. Should a thunder-storm arise in the daytime, he at once leaves his place of concealment, as is manifest from his being frequently taken in nets at such times.

This fish is also afraid of bright objects, which it carefully avoids when such come in its way. Fishermen aver, indeed, that if a birch-pole, stripped of its bark, is sunk to the bottom of the stream, no eel will venture to pass over it.

It may not be generally known that the eel can move as rapidly backwards as forwards. Hence when entrapped, if he can once get his tail through the interstices of his prison, he usually manages to set himself free.

The eel, as is well known, is very tenacious of life. In parts of Sweden, the fisherman, to prevent its getting out of the boat, after wrapping the skirt of his coat, or what not, around the fish, grasps it near the head, and bites it across the neck, so that the spine is crushed, and death ensues.

Formerly all sorts of tales were told as to the propagation of eels. As, for instance, that they were bred from manure, from the bodies of decomposed animals, from placing together two tufts of grass wet with dew; as also, that they could be produced at pleasure by merely casting small pieces of eel-skin into still water. Even to this day, the common people in some parts of Sweden firmly believe that all the eels in any one lake are born of a common mother, and that such a general parent is found in every lake inhabited by this fish.

For a long time it was a disputed point as to whether the young eel did not come into the world alive; and it has been only very recently admitted, I believe, that the eel breeds in the same manner as other true bony fishes.

Ekström has some pertinent remarks on the propagation of

the eel, the result he tells us, of attentive and long-continued observation; but it is probable that when he wrote, he had not seen all that has been published on the subject by the naturalists and comparative anatomists of continental Europe.

"About the middle of June," he says, "when the days are calm and warm, the eel congregates in shallows with clayey or soft sandy bottoms, abounding with the common reed (Arundo Phragmites, Linn.) Afterwards it ascends somewhat from the bottom to about mid-water, where it entwines itself in a spiral form around a reed, and moving its body in a peculiar manner, causes the reed to swing to and fro like a The opening of the vent in eels captured at this time is much swollen, and a dark yellow fluid, resembling oil, issues therefrom. If the fish be cut open, the sexual organ is found partly filled with this fluid. That this is a real spermatic fluid I infer, as well from its never being found in eels captured during the winter or spring; as from the fact that it is first observable on the approach of the spawning season, as a thin whitish fluid, but obtains consistency, and the oil-like appearance spoken of, when the lek actually takes placecharacteristics which disappear altogether when this is over. I have never found roe in the body of the eel, but I nevertheless believe that it is through the deposit of eggs that the fish propagates its species; for when spermatic fluid is evidently found, one may with full certainty conclude that, although the females of this species are in inverse ratio with those of some other kinds of fish, and consquently less commonly seen than the males, eggs are also to be found.

"I have frequently seen eels with so-called young ones in the cavity of the abdomen, and at times near to the vent itself; but on close inspection, they have all proved to be intestinal worms (*Echinorhyncus tereticollis*, Rud.), by which this fish is much troubled."

From personal experience, I can say nothing as to the period when the eel spawns. One fisherman in my neighbourhood imagined it to be about the dog-days, which nearly agrees with Ekström's supposition; but in general these men professed total ignorance of the subject.

The eel attained to a considerable size with us; in the

Wenern, certainly to ten or eleven pounds. My own fisherman assured me that his father captured an individual weighing fourteen pounds; and mentioned, moreover, that to his knowledge an eel, taken in a lake in Dalsland, was some years since brought into the town of Wenersborg for sale, that weighed no less than eighteen pounds.

Before proceeding to narrate my experience in connection with those species of real interest to the sportsman, a passing reference may be made to the other inferior kinds of fish found in the neighbourhood of Ronnum.

The Prussian Carp was common in the ponds in my vicinity, and is found almost everywhere in the interior waters of Scandinavia The White Bream is also common in all the lakes and rivers. The Ballerus was likewise very abundant. though not much in request, not being in repute for the table. The Wimba, likewise abundant, but not in repute. The Asp, which is altogether unknown to us in England, was common both in the Gotha and the Wenern. It is a leathermouthed fish, the scales large, colour whitish, and in shape, as well as in some of its habits, not altogether dissimilar to the salmon tribe. The Roach is also plentiful all over Scandinavia. As also the Grislagine. The Rudd was in the locality, and over Scandinavia generally. As also the Bleak and the Minnow. The Common Carp is confined almost altogether to the more southern portion of Sweden. It is not indigenous to the country, though the period of its introduction is unknown. The Gudgeon is also common. The Groundling was found, though sparingly. The Beaked-Sik, the Lof-Sik, the Martensmess-Sik, the Helge-Sik, and the Sik-Bleak were all common in the Wenern and the Gotha. The River Lamprey, implying nine eyes, was also common; and the Sea Lamprey was found about twenty miles to the southward of Ronnum.

## CHAPTER V.

The Salmon—Abundant in Scandinavia—Readily attracted
—Afraid of Shadows—Speed—Spawning Season in
Gotha—Size—Mr. Keiller's Investigations—Salmon and
Trout in the Save—Spawning Season in the Save—The
Spawning-bed—The Male and the Female—The Jaws of
the Male during the Breeding Season—Desperate Contests
between the Males—Other Theories—Slow Growth.

THE Salmon (Salmo Salar, Linn.) was abundant in the Gotha during the season, but not higher up than the deep pools immediately below the magnificent falls of Trollhättan (unless, indeed, a chance one made its way through the twelve or fourteen sluices at that place, a thing little likely to happen), their great height opposing an insurmountable barrier to its farther progress. The salmon is also very common in all the Scandinavian rivers from Scania to Lapland, as well in those falling into the Baltic as in those which discharge themselves into the North Sea and Cattegat. The fish found in the streams flowing to the westward, however, according to Swedish naturalists, are the fatter of the two, which, if really the case, is properly attributable to the superior saltness of the water.

The salmon is readily attracted by bright objects, and hence the adoption of the torch during the night-time, to beguile him to his destruction. The Norwegian fishermen, taking a hint from this known fact, therefore suspend sheets, or whitewash the rocks in the vicinity of the nets, or instead of rocks erect white boards, called *Laxe-blikke* (freely translated, salmon attractors), thereby to represent the foam of the cataract of which they presume him to be in search.

In the same ratio as white attracts the salmon, red, on the contrary, according to Pontoppidan, is the object of his greatest antipathy; so that in parts of Norway the fisherman never ventures to follow his vocation, attired either in jacket or cap of that colour. The learned Bishop makes mention, moreover, of an individual who was so deeply impressed with the truth of this assumption, as to remove the red tiles from the roof of

his house, and to substitute others in their place, of a more sombre hue!

The salmon is believed to be afraid of shadows; even that of a bird on the wing will send him from the surface. When swimming along the coast of Norway, if he should come to a spot where a lofty mountain casts its shadow over the water, he retreats, we are told, with precipitation; while, on the contrary, he seeks places where light is spread over the sea, whether coming through the outlet of a fjord, or an opening in the mountain range; facts of which the fisherman does not fail to take advantage, when placing out his nets.

The speed of the salmon is very considerable. "During the continuance of the westerly or north-westerly storm that drives him into the Randers-fjord" (which lies nearly east and west)—so we are told by Faith, who for fourteen years was the proprietor of Frysenvold's salmon, situated on one of its tributaries—"he, keeping to the deeps, goes vigorously forward, and it takes scarcely four hours for him to make his way from the sea to a certain fishery, a distance of six Danish, or twenty-eight English miles. The speed of the fish is, however, greatly regulated by the wind; for if soon after his entrance into the fjord, or the river, as the case may be, the wind suddenly changes to the east or south, he greatly slackens his pace, or remains altogether stationary."

"One may predict by the salmon twenty-four hours previously," Faith goes on to say, "if a storm from the west or north-west is at hand, for in that case its upward progress is very rapid."

"It is deemed a condition for the ascension of this fish up the fjords and rivers," he tells us, moreover, and the remark applies to Jutland generally, "that the wind should blow off the land; whence such a wind is in some places called a Laxevind, or salmon-wind."

"The salmon," Faith further informs us, when speaking of Rander's-fjord, and his remarks are curious, "shows himself only during certain hours of the day at the fishery—namely, in the morning from five to six, again from eight to nine, and from eleven to twelve; in the afternoon from five to six and from eight to nine; at night from eleven to twelve, and from

one to two. Between the hours specified he is captured either within or near to the fishery. During the intervening period he without doubt lies still, or seeks for a passage elsewhere. He dreads a thunder-storm, and should one arise during the periods of his ordinary coming, he does not show himself at all. Should several salmon be seen for some days together outside of the fishery, without its being practicable to capture them, and that other salmon should arrive in the interim, these different groups do not associate until after the lapse of a day. If one be taken, it is evident the rest look out anxiously for their missing companion; and should several be captured, the restlessness of the remainder is on the increase. If only a single one remains, he rushes to and fro with anxious rapidity, until he himself becomes a prisoner."

With us in the Gotha, the salmon spawned at the end of October or beginning of November; for when captured with the rod in the early part of the former month—and I never fished later—the roe appeared mature, and the milt of the male was fluid. Nilsson, in corroboration, also names October; but according to Danish authorities, the lek of this fish in Jutland occurs at a much later period, even so late as the month of February, or beginning of March.

The Scandinavian salmon attains to a large size, but I never heard of any captured in the peninsula at all comparable to Mr. Grove's famous fish, which he himself told me weighed eighty-three pounds. With us in the Gotha it was said to be sometimes taken of from fifty to sixty pounds in weight; and this I can well believe, from the monsters—more resembling porpoises than anything else—that I myself have occasionally seen in the pools below Trollhättan. Nilsson speaks of seventy pounds (Swedish weight be it remembered, which is six per cent. less than the English) as the maximum of this fish; but I doubt if the capture of so large a one is on record.

The natural history of the Salmon tribe having of late years excited much interest in England, I cannot do better than devote some remarks, the result of an attentive study of their habits for several consecutive years, recorded by my gifted friend and countryman, Mr. Alexander Keiller; observations which I doubt not, will be interesting even to the unscientific

and general reader. They were made by that gentleman during a long residence on the Save, a tributary of the Gotha, and at a distance of from fifteen to twenty miles from the sea, and he saw everything to peculiar advantage—the Save at Jonserud, where the observations were made, being invariably clear. That river, which is of a moderate breadth, has its rise far up the country; during its course it passes through a chain of large lakes, the last of which, the Aspen, is immediately above the mansion, and all matter, therefore, brought down from the interior, is deposited in that extensive sheet of water.

Mr. Keiller's observations are the more worthy of notice, as for the better elucidation of the subject he caused a small moveable observatory to be erected over the stream, where he spent many hours daily, watching the movements of the salmon.

I give the substance of my friend's words from verbal communications made to me at various times. Salmon, he says, are pretty abundant in the Save. The fishery produced, including grilse, about three thousand pounds weight annually. Many fish were taken in weirs, others in nets, or by the rod. The larger salmon always appear first in the spring; as the summer advances, the fish are much smaller; but in the autumn heavy fish again show themselves. These are not fresh run, however; at least, they are somewhat discoloured, from which it is to be inferred they have been lying either in brackish water, or in the deep pools below.

The common trout is exceedingly scarce in the Save, that is, at Jonserud; but at some distance higher up the stream it is abundant.

During the autumn there are numbers of the sea-trout, and some of considerable size. These fish, as well as the common trout, spawn in the Save about a month earlier than the salmon, and carry on proceedings in a precisely similar manner to that fish. Both, however, have deposited their ova prior to the salmon commencing operations, thus showing a wonderful economy of nature; for otherwise the milt, both of

the sea and of the common trout, would generally impregnate the ova of the salmon, and numberless hybrids would be the the result.

The fry both of sea-trout and salmon are in the Save, at Jonserud, indiscriminately designated *Forell*, answering, it is to be presumed, to the so-called Parr. Both kinds, no doubt, go to the sea about the same period.

Salmon commence spawning in the Save the first days in November, and continue throughout the month. The female deposits her eggs in comparatively still, shoal water, from six to eighteen inches in depth, immediately above a rapid. She selects such a situation for the following reasons; comparatively still water in preference to a current, because otherwise the exertion of retaining her position, and spawning combined, would be too much for her powers; a shallow, instead of a pool, that she may be secure from the sea-trout and other fish, which, if in deep water, would congregate about her to prey upon her eggs; and lastly, that her ova on dispersion may be carried by the gentle stream to a secure resting-place amongst the stones below.

It is commonly supposed that, in conjunction with the male, the female salmon scrapes a hole, or furrow in the bed of the river, in which to deposit her eggs, and that afterwards, and as a protection from their numerous enemies, they cover them over with gravel; but such is not the fact, at least in the Save. The male has nothing to do with this part of the work; and the ova, instead of being dropped into a cavity, are deposited on a comparatively smooth surface.

Whilst in the act of spawning, the female retains her natural position. Her belly is near to the ground; at times, indeed, probably to rest herself, actually touching it. The process of dropping her eggs appears to be slow. When a few are collected, she turns on her side, waves the flat of her tail gently downwards to the roe, but lifts it up again with great force, by which such a vacuum is caused, as not only to raise the eggs from the ground, and thus to distribute them in the stream, but to throw up a mass of dirt and stones, the latter not unfrequently of very considerable weight.

As the mere distribution of the ova would require only a slight wave of the tail, it appears that the violent lunge is for the express purpose of disturbing and muddying the water, thereby to conceal the eggs, in degree, at least, from their numerous enemies lying in wait below.

When spawning has once commenced, it seems that the male can no longer retain his milt, nor the female her roe, the emission continuing under all circumstances. This has been often noticed, even long after death.

The female salmon leaves the spawning-bed many times during the day, and makes little excursions about the river, generally into the dead water above. At times these trips are somewhat extended-say to a distance of some seventy or eighty paces. "But," said Mr. Keiller, "as from my elevated position I could watch all her movements, I feel perfectly confident that, during her absence from the spawningbed, she never in any way comes in contact with the male fish. I am at a loss to understand the cause of these trips. At times, I have thought it is for the purpose of resting herself after the fatigue or exhaustion of spawning; at others, I have imagined it to be a special provision of nature; for if her original position were a bad one, and she were to remain stationary, all her roe would be destroyed; whereas, by occasionally moving as she does about the stream, and dropping her eggs as she goes, some of them, at least, are pretty certain to find shelter."

The specific gravity of the roe is but little greater than water; when once therefore in motion, unless intercepted, it will float a considerable distance down the stream. A large portion of the eggs are of course devoured; but the remainder find their way into crannies, and under stones inaccessible to an enemy.

From the slow manner in which the salmon spawns, it might be thought on the first view of the subject that a large portion of the eggs in the body of the fish were in an *immature* state; but such is not the fact. To prove this, Mr. Keiller once took the roe in a mass from the belly of a salmon recently captured, divided it transversely into three equal parts, and applied to each the needful quantity of milt. In due time the

several portions produced fry, though it is true that the portion taken from the upper part of the belly where the eggs were of a somewhat less size, was less productive than the other two.

So far as Mr. Keiller's observations extended, the salmon never spawns on the bare rock, or amongst very large stones, for the reason, that in such situations she would be unable to raise the needful turbidity to conceal her progeny.

At the tail of a spawning-ground, the work of a single salmon—or, at all events, never occupied by more than one at a time—there is, towards the close of the season, an immense accumulation of gravel, stones, etc.—occasionally, indeed, a good English cart-load. What with ice and floods, however, not only is this heap in great part carried away, but the very cavity from whence it came, often of great extent, is so filled up, that by the succeeding summer the bed of the river has assumed nearly its usual appearance.

"What may be the case in the earlier part of the season, when the fish are in the pools or in deep water, I could not affirm," said my informant; "but after the female commences spawning, I have never but on one occasion seen the male in actual company with her. His station at that time is at six or seven feet distance, directly in her wake, and just beyond the heap of stones spoken of. And the only apparent part he takes in the generative process, is by the deposition of his milt, which, of course, becomes mixed with the ova of the female, as the stream drifts them past him.

"The exception noticed occurred thus: the female was lying on the spawning ground, when suddenly the male, which had previously been at some little distance, swam up, and laid himself immediately alongside of her. Although their proceedings were most carefully watched, nothing that could be construed into sexual intercourse took place between them; nor did either fish in any way alter its swimming position, but a vibration or champing of the jaws of the male was distinctly remarked whilst he was by her side. This the observer was enabled to distinguish in consequence of the dark colour of the fish contrasting with the lighter colour of its mouth when opened. The vibration continued for a

second or two, when the male left the female, and retired below."

It has been shown that whilst the female is spawning, the male is stationed some few feet in her rear. Again, at a respectful distance behind him—say twelve or fifteen feet, but still in a direct line with the female—a lot of trout, sea-trout, and other fish, are always posted, in readiness to pounce on the eggs, when the female starts them adrift with her tail. On the appearance of the several clouds of dirt, it is amusing to see them all scurrying into the thick of it, and following the ova down the stream.

It has never been observed that the female has a liking for one male more than another; but it has been repeatedly noticed that some one male in particular occupies the same spot.

At some little distance to the right and left of this male, two or three other males are usually to be seen, and much of his time is occupied in keeping these interlopers at a distance. His charges against them are most vigorous and determined, and so frequent that he is seldom stationary for a minute together. This almost incessant motion of the male seems a special provision of nature; for were he to remain still, only that portion of the ova which passes over him would be impregnated, whereas by moving so much about his milt becomes distributed, in a manner, over the whole stream.

As is well known, the jaws of the male salmon during the breeding season are much elongated by the growth of a cartilaginous projection from the extremity of each. That on the lower turns upwards, and when the jaws are closed occupies a deep cavity or socket between the intermaxillary bones of the upper jaw.

The anatomical construction of these extraordinary elongations is curious. The lateral longitudinal surface of the hook on the lower jaw is greater than that in front, thereby giving it more strength, and, at the same time, offering less obstruction to the flow of the water into the gills or lungs during respiration. And from the hook inclining backwards at the top, it beautifully facilitates this end.

The upper snout is hollow or vaulted. This cavity would

also cause hindrance to the free flow of water to the lungs, were it not for a web, forming a sort of hanging ceiling, attached in front and at the sides to the jaw, but open in a parabolic form behind. This vault is so large in a twenty-pound fish, that between it and the hanging ceiling the finger may be inserted from behind, nearly up to the second joint.

After the termination of the spawning season the protuberances on both jaws are gradually absorbed, and the head of the fish resumes its ordinary shape.

On the first appearance of the male salmon in the Save in spring he is entirely without the excrescence spoken of, or, at all events, has only the very germs of it; and throughout the summer its growth is slow, but it increases more rapidly towards the spawning season, at which period it has attained its full development.

No elongation whatever takes place on the jaws of the female salmon. They remain in the same state all the year round.

It is the commonly received notion that the hook on the lower jaw of the male salmon is for the purpose of enabling him to assist the female in forming a hole in the bed of the river for the deposit of her roe. But such Mr. Keiller convinced himself is not the object for which it is designed. In his opinion it is intended to prevent the males, which in the spawning season are most pugnacious, from killing each other; for when the jaws of even a twenty-five pound fish are distended to the utmost, the hook is so much in the way that the opening in front of the mouth will admit little more than the breadth of a finger, and consequently he cannot grasp the body of an antagonist. Indeed, were he enabled to do so, he would soon destroy him.

In the breeding season the contests between the males are incessant and desperate. Mr. Keiller repeatedly noticed an immense salmon charge another with such thorough goodwill, as to throw him fairly out of the water. As it is, their battles are bloody enough; not only are fish observed to be gashed in every direction—probably by their side teeth, for those in front, or on the tongue, cannot be brought properly into play, owing to the hook—but with large pieces of flesh

and skin actually hanging down their sides. At the close of the season all the males are covered with scars. Unless one has seen the fish at this time, it is difficult to conceive his mutilated condition; and it appears certain, that were it not for the hook not more than a single male salmon would leave a spawning-ground alive.

But it is the males alone who, at the termination of the spawning season, are thus seamed with scars; another evidence, were such wanting, that the injuries have arisen from combats between themselves; for were the wounds inflicted by otters, as many imagine, the females would be equal sufferers with the males, which is not the case.

To say nothing of the injuries salmon inflict on each other with their teeth, were it not for the cartilaginous elongation on the upper jaw, which forms a kind of pad in front of the brain, the concussion on the occasion of the desperate charges spoken of would be so great as to stun the assailant. When the fish makes his onset his jaws are usually closed, and the hook on the lower jaw is embedded in the upper, thus affording the latter support, and still further lessening, as applies to himself, the effects of the concussion.

"Nature," says my friend, in conclusion, "only works by fixed laws. To have given the male salmon a share of human intellect was not in accordance with her plans. She resorted to simpler means, and instilled envy and jealousy instead of reflection and reasoning power, which, at all events, would not have given the stimulus to exertion that the minor attribute confers. In order, however, to moderate the effects of these ferocious passions, this proboscis was bestowed, which thus prevents the male from inflicting mortal injury either on his rival or on himself."

So much for my philosophic friend, the results of whose experiments and observations are certainly very curious, and every naturalist will feel much indebted to him for paying such close attention to a subject so very interesting. Nevertheless, one cannot always coincide with his conclusions because he does not seem fully to make out his case.

He sets completely at nought the notion, with regard to

the salmon, of intercourse between the sexes; and from the facts he adduces I feel partly inclined to agree with him. But then he admits that the female occasionally leaves the spawning-ground, and makes little excursions about the river, at which time it seems quite possible she may have proved unfaithful. He says, it is true, that from his observatory he could distinctly watch all her movements in the interval, and that she never came in contact with any male. But with the best of eyes, and though the position of the observer may have been ever so favourable, any one might be deceived at sixty or eighty paces distance, more particularly when looking at an object pretty deep, perhaps, in the water.

He suggests two causes for her taking these trips: first, that she may drop her ova here, there, and everywhere in the river as a provision against casualties; secondly, the requirement of rest from her labours. But these suggestions are unsupported by any kind of proof. In answer to the first, I say, why should not Nature have prevented her from taking up a bad position in the first instance? To the second, is it not quite as reasonable to suppose that her excursions are made in search of food, or that if she were exhausted with spawning, and required rest, she would lie still?

Neither does it appear to me that my friend's theory as to the male salmon stationing himself a little in the rear of the female, for the purpose of impregnating her eggs as they drift past him, quite holds good; for, by his own account, the male is himself often absent from his post in chase of rivals, during which time, so far as the ova from his particular female are concerned, his milt is altogether wasted. When, on the contrary, she in her turn is on the move, her ova have little chance of impregnation, at least from him.

But under any circumstances, and in spite of her lunges, a large portion of the ova must of necessity be deposited amongst the stones and gravel immediately behind the spawning-bed, and prior to reaching the male, so that, according to my friend's theory, even if the marital male be at hand, that portion, at all events, will not be benefited by him.

Then again, he assumes that though the lunge of the

female's tail when on the spawning-bed is partly to lift her ova from the bottom of the river, and to distribute them in the stream, it is principally to raise a cloud of dirt, thereby to blind the small fish lying in wait for them below. Is it not just as possible, on the contrary, that the violent motion of the tail may rather be to facilitate the exit of the roe from her own body—the throes of parturition, in short? And as to the cloud he speaks of, can it really be dense enough to conceal the eggs? If the bottom of the Save was muddy, I could conceive this to be possible; but where only sand and gravel exist, as is the case in that river, I should say decidedly not.

In another place, my friend assumes that the female never spawns on a rocky bed, because she could not there raise up the needful "cloud" to hide her ova whilst they were progressing down the stream. To my mind, the more probable reason for her avoiding rocks is that, in so exposed a situation, her eggs would not find the needful shelter from their enemies. Neither would they be secure from floods, which on ground divested of gravel and small stones would inevitably sweep them bodily away.

But in spite of my friend's philosophy, what pleases me most of all, is the very ingenious reason he assigns for the male salmon being provided in the spawning season with this elongation of the jaws—namely, that he may neither injure his adversary, nor hurt himself in his hostile charges. If such really be the case, Nature, it must be admitted, has been more bountiful to the genus Salmo than to most of her other creatures; for we know of few animals besides (and many in the breeding season are equally pugnacious with the salmon) that are especially equipped at that period with foils of any kind to curb their combative propensities, or who, when deprived of the free use of their teeth, have their head so defended, as to enable them to perform to perfection, and with impunity to themselves, the part of a battering-ram.

Mr. Keiller affirms, it will be noticed, that the hook on the jaws of a twenty-five pounds male salmon, in the breeding season, prevents him from grasping, in front at least, a substance of more than an inch in thickness. He may be right;

but having repeatedly killed salmon in September and October, in Sweden, with baits of so large a size as to have required more than that space for their mere admittance into his mouth, I should imagine my friend has somewhat underrated the expansion of their jaws at that period.

In conclusion, "It is very difficult to divine," as the late Mr. Scrope truly says, in his fascinating work—"Days and Nights of Salmon Fishing," when speaking of the subject in question, "what may be the use of this very ugly excrescence." But if Mr. Keiller should have hit the nail on the head—and there are high authorities who say he has done so—the knotty point which has for ages puzzled the naturalists, is finally set at rest.

Twelve or fourteen years ago, it may be proper to add, my friend made many discoveries regarding the artificial impregnation of roe, which I was then desirous of publishing. But as he from time to time put off furnishing me with the needful details and drawings, I have been forestalled by others, and it is now too late to submit them to the public. It is, however, very satisfactory to find that the results of his experiments have been corroborated to the letter by Mr. Scrope, Mr. Shaw Mr. Young, and other naturalists.

His theory also regarding the young fry, their slow growth, the period when they go to the sea, mainly agrees with theirs. "They do not leave the eggs," he says, "until April. remain in the Save during that summer and the following winter, at the expiration of which they are from two to three inches long. The second summer they also stop in the river, during which they double their size—that is, they attain to five or six inches in length. Whether they go to the sea in the autumn, or not until the following spring, is not positively determined; but it is rather believed they depart before the setting in of the winter, for the reason, that in February and March great numbers of fish resembling salmon in miniature, and of a pound or so in weight, are caught in the brackish water at the confluence of the Gotha with the sea, which are supposed to be the fry that left us about three months before. The third autumn they revisit the rapids of the Save in the shape of grilse of several pounds in weight."

Mr. Keiller's conclusions as to the slow growth of the fry are drawn from the following facts. In July—that is, some two months after the eggs are hatched—there are always two distinct families of the salmon fry in the Save: the one about two inches in length, but too small to take either the natural or artificial fly; the other family averaging from four to five inches in length, which take both baits with avidity. There is no intermediate family. The two-inch family can therefore be no other than those recently hatched; the five-inch family the breed of the preceding season.

"In corroboration," says my authority, "I once had occasion to dam up a small portion of a branch of the Save, at Jonserud, the upper end so effectually as altogether to debar communication with the river above—that is, as regarded fish; for the water found access to the pond amongst the stones of which the dam was composed. At the other end indeed, there was so very small an outlet that it was hardly possible, much less probable, for even fry to ascend or descend. These dams were constructed after the salmon had spawned in the autumn, and the space enclosed being full of their roe, the pool, during the succeeding summer, swarmed with fry. Beyond, however, observing that they were of a very diminutive size, and too small to take fly or bait of any kind-in short, that they were of the first family—I paid but little attention to them. But the second summer the pool was full of fish of five or six inches in length, and of that size only; and as they were very eatable fellows, I captured numbers of them. They in every respect resembled the second family common to the Save, but they were a trifle fuller and larger, which I attributed to more sunshine and less snow-water—in short, to a greater degree of warmth. The second winter was unfortunately a severe one, and they all died."

## CHAPTER VI.

Fish allied to the Salmon tribe—The Salmon Trout—Abundant in the Autumn—Size—The Grey Trout—Also Common—Swimming habits different from the Salmon or the Salmon Trout—Very tenacious of Life—Flesh considered inferior—Size—The Wenerns-Lax—Different appearance of male and female—Resemblance to the Grey Trout—Very abundant—Spawning Season—The Silfver-Lax—Distinguishing features—A splendid Fish in appearance—The Common Trout—Two varieties—The Charr—Supposed to be six different species of—The Smelt—Very abundant—Varieties—Size—Disposition—Spawning season—Taken in large quantities—Sir T. M. Wilson's Experiments.

To proceed with the enumeration of the fishes in my vicinity. The Salmon Trout (Salmo Trutta, Linn.) was common with us in the autumn; but as with the S. Salar, was probably only found below the Falls of Trollhättan. This fish in the season is also common in most of the Scandinavian rivers, whether flowing into the Baltic or the North Sea. According to Nilsson, it is an inhabitant of the lakes of the interior; of such, it is to be presumed he means, as have no accessible communication with the ocean. Kröyer informs us it is common in the fjords and rivers of Jutland, though less so than others of the Salmo tribe.

Swedish naturalists give us no information as to the period at which the salmon trout spawns; Kröyer imagines in June and July; but in this matter I consider he is mistaken, not being aware of any species of the genus Salmo spawning until towards the end of the year—none certainly in my neighbourhood, or on the western coast of Sweden. Bloch, who I doubt not is right, assigns October and November as the months in which this fish has its lek.

The salmon trout attains to a considerable size in the northern waters; Kröyer says to twenty pounds. Faber gives twenty-eight inches as its maximum length.

The flesh of this fish, which is red, is in high repute for the

table, next perhaps to that of the salmon. Many, indeed, give it the preference, as being more easy of digestion.

The Grey trout; sea trout; bull trout (S. Eriox, Linn.), was common with us in the autumn; but unless identical with the great trout of the Wenern, it was only found, as with the salmon and salmon trout, below the Falls of Trollhättan. Owing to the confusion arising from local names, it is difficult to define the geographical limits of this fish; but it seems common during the season, as well in the rivers that flow into the Cattegat, as into the Baltic, and in those streams that empty themselves into the North Sea.

The salmon trout, as also the salmon, when making their way up a fjord or river, are said to hold to the middle of the stream, and to the deepest water; but the grey trout, on the contrary, is believed to take advantage of slacker water. It is also recorded of this species that they proceed into much shallower water than the salmon trout or the salmon; to such shoals, in fact, as render it difficult for the fishermen, in their flat-bottomed punts, to get up to them. Hence the established fisheries that are most successful with salmon, are not equally fortunate with the grey trout, and vice versa.

The grey trout is very tenacious of life, and exists for some time after being taken out of its native element. During the winter, we are told, it may be kept for months in a sump, or fish-box; and the fish-dealers believe it can live equally well in fresh as in salt water. It is, moreover, said of this trout, that when put into spirits of wine, it lives longer than most other fish.

There is an old saying among the Danish fishermen, that when the grey trout first enters the fjord from the sea, it is sluggish, and its powers of vision dull. Certain it is, that, as with us in England, it remains for some days in brackish water, before continuing its journey up the river.

The grey trout is reported to be very voracious. Kröyer says he has sometimes found shrimps, more than one species of *Goby*, and other small fish in its stomach; as also that in want of other sustenance the males at times feed on the roc of the female.

The flesh of this fish is held to be very inferior to that of

either the salmon or the salmon trout. When fattest, it is of a pale pink colour; but as the fish falls off in condition, it becomes yellowish-white. Although much less palatable than the salmon, it is nevertheless, as Kröyer tells us, equally dear or dearer in Copenhagen; but that is because this fish can be obtained alive, whereas the salmon is only to be had dead.

The grey trout with us spawned towards the end of October, or beginning of November. Swedish naturalists are silent on the subject, but Kröyer assigns November, December, and January as the period of the lek.

This fish attains to a large size in the northern waters. Faith affirms that in Jutland it has been captured of thirty pounds weight.

The male and female adults always differ somewhat in appearance, and in the spawning season considerably. At that time, indeed, the male, as with the male S. Salar, becomes so changed in form and colour, as to be hardly recognisable. The cartilaginous substance on his snout, in like manner with the S. Salar, then becomes greatly developed, and though the "ugly excrescence" only continues for a time, yet it has conferred on the male Wenerns-Lax (as also, I believe, on the male S. Salar) the appellation of Krok, or Hook, by which name (and by that alone, Lax being dropped altogther) he was known with us all the year round.

Very considerable resemblance existing between this huge trout—for though called Lax, or salmon, he is no other, as we have said, than a trout—and the S. Eriox, or grey trout of authors, it becomes a subject for the consideration of Ichthyologists, whether it may not be identical with the migratory species last named, though slightly altered by long permanent residence in the fresh water to which it is thus restricted. The probability of the two being identical, is increased by the fact that the smelt, which, in England, is considered of marine origin, is, as will presently be shown, very numerous in the Wenern and other Scandinavian lakes, to which access cannot be obtained from the sea. In all its characters the Wenerns-Lax answers to the S. lacustris of authors (S. ferox, Jardine); but if the question as to its identity with the S. Eriox be decided in the affirmative, the S. lacustris has probably no

existence as a species; and rather than class the Wenerns-Lax by that name, I prefer retaining it under that by which it is known with us.

The Wenerns-Lax was very common in my vicinity, as also, I imagine, in most of the great waters throughout Scandinavia. From what Læstadius says, I infer it to be an inhabitant of the Lapland lakes; for when speaking of trout, he tells us they attain to twenty pounds weight and upwards, and that one species is called the  $Gr\dot{a}$ -Lax, or grey trout, grey being the predominant colour of ours.

Many of these fish remained in the Gotha all the year round, but by far the greater portion, when the spring was pretty well advanced, left us for the Wenern, where they passed the summer; and it was not until the fall of the year that they again revisited our rapids, for the purpose of spawning.

The Wenerns-Lax is held in estimation as food; but the flesh, even when in high condition, is much less firm than that of the S. Salar, and it also differs materially in colour, being rather of an orange-yellow, than red.

The spawning season with this fish was the end of October or November; but long prior to this period—generally in the month of August—they fell down from the lake into the upper part of the river. The first batch consisted for the most part of males; and it was not until some little time afterwards that any considerable number of the females joined company. When the lek was over, the fish either headed back into the Wenern, or retired to the deep pools in the Gotha, where they remained during the winter, to recruit their strength.

The young of the Wenerns-Lax, as indeed those of every species of the genus Salmo, went with us by the general name of Öring.

This fish attains to a great size, especially the males, which on the average are nearly a third larger than the females. I have not unfrequently captured males of thirty pounds weight and upwards, whereas the females seldom exceeded twenty pounds. I cannot remember our taking more than one female exceeding twenty-four pounds, and she was considered a monster in her way.

The Silfver-Lax (Silver-Salmon), also presumed to be a

marked features. The greater portion of its body is of a much more silvery white, and hence its Swedish name. It is a more elegant and salmon-shaped fish, has a more forked tail, and is much smaller just before the caudal fin; the gape is smaller, the posterior end of the upper maxillary bones is in a vertical line immediately under the pupil of the eye, and the body is marked with cruciform black spots.

I am not sure that this fish has been described by naturalists, but if so it must have been done somewhat inaccurately.

May not the Silfver-Lax, which differs as much as night from day from any other fresh-water trout I have seen, be identical with the S. Trutta of Linnæus, which it much resembles, though somewhat altered by long permanent residence in fresh water, to which it is confined?

Until, therefore, Ichthologists determine to what species this fish really does belong, I think it best to retain the name by which it was known in the Gotha and the Wenern.

The Silfver-Lax was not uncommon with us at certain seasons of the year, in the Gotha at least. Owing to this species not being very well identified, it is impossible to define its geographical limits. From Læstadius speaking of a blank, or shing-lax, however, I am inclined to believe it to be an inhabitant of Lapland, and, if so, it is probably pretty generally distributed throughout Scandinavia.

The Silfver-Lax is a splendid fish in appearance, and excellent for the table; and though of a lighter colour, it is held in nearly equal estimation with the salmon.

It is to be presumed that this fish spawned about the same period as others of the genus Salmo; but though an old servant of mine asserted that he had on two or three occasions in the spring of the year—almost the only season, indeed, of our capturing it—found incipient roe of the size of a pin's head in the female, I myself never saw this fish either preparatory to, or during the spawning season. What became of it at that time was always a mystery to us; but the presumption is, it either held its lek in the deeps, or (which is less probable) that it crossed the Wenern, and ascended some of its tributaries.

It was always in the highest possible condition, even in the early part of the spring, at which time the adult Wenerns-Lax, having only partially recovered from the effects of spawning, are often not only somewhat meagre, but infested with parasitical animalcules.

The usual weight of the Silfver-Lax was from seven to nine pounds. I have, however, killed this fish of fourteen pounds weight, which is the largest I have ever heard of, but not of less than from three to four pounds weight.

We never took many of these fish: four or five was my best day's sport. When hooked, it shows much play, and plays, moreover, so differently from other species of Salmo—jagging the line, as it were—that without actually seeing it, I knew almost to a certainty what fish was on the hook.

The Common Trout (S. Fario, Linn.) was found in my vicinity; as also, by all accounts, in almost every lake and river from Scania to Lapland. But as Ekström does not enumerate it amongst the fishes of the eastern Skärgård, it is not, I apprehend, even a casual visitor to salt, or rather brackish water.

According to Nilsson, there are two species of the common trout in Scandinavia—namely:

- 1. The S. Fario, Linn.; (Bäckrö; Stenbit; Sw.; so called from its chiefly inhabiting stony brooks), which the Professor describes as from six to eight inches in length, and as never being found in the Alpine regions.
- 2. And the S. punctatus, Cuv., which he states to be twelve inches in length, and as being confined chiefly to the rivers and lakes of the Fjälls.

The common trout attains to a considerable size in the peninsula; for, if I mistake not the fish, I myself have killed it of eleven pounds weight—not, it is true, in the vicinity of Ronnum, but in a tributary of the Clara in Wermeland.

In addition to the several species of the genus Salmo enumerated, Nilsson includes the S. Ocla, Nilss., and the S. Truttula, Nilss., in the Scandinavian Fauna. But unless one or other of these fish be identical with the S. Eriox of Linnæus, I am not aware of their having come under my observation.

The S. Ocla, the Professor tells us, is found in the river Dal, and perhaps in other rivers. It arrives from the Baltic about the summer solstice—that is, somewhat later than the S. Salar, and spawns at the same time as that fish. Its flesh is white; length, hardly two feet, and it seldom exceeds four to five pounds in weight.

The S. Truttula, Nilss., according to the Professor, ascends from the sea to rivers and lakes. Length, from twelve to sixteen inches; the flesh pale, scarcely reddish; has examined specimens from Gothenburg and the lake Wettern.

The Charr, though not found in the Wenern or the Gotha, inhabits several of the waters of the peninsula.

Although some of the best European authorities admit, I believe, of only one species of Charr, Nilsson includes no less than six species in his Prodromus.

1. The Salmo alpinus, Linn., which, as the name would denote, is confined, I believe, to the more alpine regions of the peninsula. Læstadius, when speaking of this fish, says:

"The under part of the belly is red; the back, dark green; the sides, which are sprinkled with small round spots, intermediate between red and green. It is the handsomest fish in our waters. It would seem properly to belong to the fjäll lakes, of which, with the exception of a single species of trout, called in Lappish Tabmok, it is the only inhabitant; and even if found in certain lakes in the wooded district below, it is beyond doubt only in such as are supplied with water from the fiall lakes. It even dwells in lakes situated at so great an altitude as, at all seasons, to be sheeted with ice. It leks in September on stony ground, and is then taken in large numbers, as well in the flew as the drag-net. During the spawning season it changes colour greatly, the usual light red under the belly then becoming dark red. Though a small fish, weighing only from one two pounds, the ova forming the hard roe, nevertheless, are as large as those of the trout, which attains to a very considerable size. Its flesh is red and delicious."

"Though not usually varying much in size," Læstadius goes on to say, "there are giants amongst this species. Fjellström, some years ago, captured on a Lång-ref one that weighed fifteen pounds."

- 2. The S. Savelinus, Linn., is only found, according to Nilsson, in the lakes Wettern, Sommen, and a few other lakes in the province of Smålland. The flesh is brown-red, fat and palatable. It spawns in October, in about six feet of water, and attains to twelve or fifteen pounds in weight.
- 3. The S. pallidus, Nilss. So far as is ascertained, found only in the Lake Wettern. The sides marked with brownish-red spots; the flesh white, lean, and considered of little value. According to the fishermen, this fish spawns in the month of October, in from thirty to forty fathoms of water, and never attains to more than eight to nine pounds in weight.
- 4. The S. ventricosus, Nilss. As far as is known, only found in the lake Sigdal in Norway, where it is said to live in very deep water. Distinguished from all other species of Salmo by inflated belly, short, white, obtuse snout, and small eyes. Length, twelve inches and upwards. Is captured in the winter time on hooks.
- 5. The S. carbonarius, Nilss., is found in several of the lakes in the wooded regions of western Norway; lives like the S. ventricosus, in the depths, and never voluntarily ascends to the surface, not even in the spawning season. In colour this fish very much resembles the S. ventricosus, but differs in the shape of the body, which is not inflated, etc. The flesh is white, soft, and little valued. Is captured during during the summer on hooks baited with living frogs.
- 6. The S. rutilus, Nilss., is found also in western Norway, but distinct from the species named. Length, twelve inches.

But the charr, whether a single species or several, is, I apprehend, more generally distributed throughout Scandinavia than Swedish naturalists seem to imagine. In the lake Ullen, in Wermeland, near to which I at one time resided, it was abundant; and this being the case, it is probably found in many other districts. As with us in England, however, the charr is doubtlessly a very local fish. Læstadius tells us, indeed, "that although plentiful in Horn-Afvan" (an extensive lake in Piteå Lapmark), "and this even at its eastern extremity, it is not found, nevertheless, in Kakel" (either forming a part of the same lake, or immediately contiguous to it), "and never descends the stream to Udjaur."

The smelt was very plentiful in my vicinity, as well in the Gotha as the Wenern. It is said not to be found in Scania; but in most of the larger lakes and rivers of the more midland parts of Scandinavia it is very common. Its limits to the northward seem not very well ascertained, but I myself have seen it in abundance in the lake Rada, in Wermeland, situated in the 60° of latitude. This fish, according to Ekström, is found in the eastern Skärgård, and I almost imagine in parts of the western also; for although not included in the reverend gentleman's catalogue of the fishes of the Cattegat (1850), yet, from its being frequently captured by the Gothenburg fishermen, the inference is, that it came from brackish, if not from salt water. Kröver speaks of it as common in the interior of Jutland, also in the fjords and on the coast.

Swedish naturalists are of opinion there is only one species of smelt in Scandinavia—namely, the *C. Eperlanus* of Flem. They consider it identical with the *C. Eperlanus marinus* of Bloch, and that the only difference between the two is in regard to size. There were persons in my vicinity, however, who averred that there are two distinct species at the least in the Wenern, and draw their conclusions not only from those fish spawning at different times, but from the great disparity in the size of the fish taking part in the several leks.

Be this as it may, the larger kinds, commonly from six to eight inches in length, which keep in separate shoals by themselves, go by the name of slom; and the smaller, from two to four inches in length, which also keep in separate shoals, by that of nors. At times, however, it happens that a scattered slom is found amongst the latter, in which case he, in some parts of Sweden, is called nors-kung, or nors-king.

The smelt is said to be of a dull disposition, and slow in its movements; and to prefer large lakes with sandy bottoms. For the greater part of the year this fish confines itself to the deeps, and it is only during the spawning season, which occurs in the spring, that it approaches the strand. It is seldom found singly, but almost wholly in large shoals.

The Scandinavian smelt has the same cucumber-like smell as ours; the larger kind, or *Slom*, in a less degree than the

smaller, or Nors. We in England have no dislike to this peculiar odour, but the Northmen in general speak of it as the reverse of fragrant. Some, indeed, imagine the fish is thereby rendered unwholesome as food; and in places, the fishermen go so far as to assert, that it drives away other fish from the fishing-grounds. Faith tells us, moreover, that in still water, the odour is so penetrating that whatever is dipped in the water where this fish resorts in great numbers, becomes impregnated.

The smelt is very voracious, feeding chiefly on insects, worms, and the roe of other fish: also, it is believed, on smaller fishes.

In Sweden the smelt is not held in general estimation for the table. Some, indeed, pronounce it insipid, and allege that it has a disagreeable flavour. But its ill repute is probably owing to the antipathy people in general entertain to its odour. In the localities where it is captured in large quantities, it is dried in the sun, or salted down, and in this state forms an important article of food for the poorer classes.

But though people may not agree as to the eatable qualities of the smelt, there is no difference of opinion as to the young of that fish, the so-called *Nors*, being the best of baits to beguile other fish; and as a consequence, it is much sought by fishermen.

In my vicinity the smelt spawned very early in the spring, occasionally before the ice broke up. The lek was held in pretty deep water, at times near to the mouth of streams tributary to the Wenern, at others in the bays and inlets of the lake itself. According to Ekström, "the lek is confined almost entirely to the night-time. At dawn of day the fish retire, and do not return to the spawning-ground until the approach of evening." "Other fishes," he goes on to say, "prefer fine weather for the lek, but the smelt the very contrary. Hence a snow-storm, accompanied by wind, occurring during the spawning-season, is called a Nors-il—that is, a smelt-gust or blast. The lek lasts from eight to fourteen days. Should it begin very early in the spring, it continues longer than if at a later period, and vice versa. The female is very prolific, and the fry are said to grow rapidly."

The smelt attains to a considerable size in the Wenern. Those that came under my own observation were not larger than are usually seen in England; but a friend resident near the northern shores of that lake, assures me that it is there occasionally captured of nearly a pound in weight. The average of the larger kind in his vicinity, when congregated at the lek, he describes as half-a-pound each.

The smelt is taken in large quantities in certain parts of Sweden; mostly during the spawning season, and with the drag-net, which with us in the Wenern was not unfrequently brought into play, even before the ice broke up.

In some places the net in question is only used during the night-time; and from the fisherman being aware that the smelt, like the Salmo tribe is generally attracted by any bright object, he makes large fires on the adjacent shores, the better to lure the fish from the deeps to within the sweep of the net.

During the summer time, when the smelt holds to pretty deep water, it is in some places captured by means of a net called  $s\bar{a}nk$ - $n\bar{a}t$ , or sink-net. This is circular in form, and suspended from an iron ring of some six feet in diameter, kept horizontal by a four-slip bridle. To the upper part of this bridle is attached a stout line, or if the water be not too deep, a pole of eighteen to twenty feet in length, whereby to raise or depress the net. But this device, also frequently adopted in Scandinavia for the capture of other fish, is not very productive, and is seldom resorted to, except for the purpose of procuring bait.

In England the smelt visits our rivers only during its spawning season; and until naturalists here had seen the specimens that I brought from the Wenern, which they pronounce to be identical in every respect with our own, they seemed little inclined to believe it equally an inhabitant of fresh as of salt water. But this fact being now proved, it would be easy to introduce the smelt into our ponds and lakes; and an admirable substitute it would prove for the dace, roach, etc., with which at present they are for the most part filled.

Sir Thomas Maryon Wilson, and according to Yarrell, Colonel Meynell, in Yorkshire, have indeed not only made the attempt, but up to the present time the experiment has perfectly succeeded. In reply to inquiries on the subject, the Baronet under date of February 21, 1853, writes me as follows:

"The short history of the smelt is this. In March, 1847, I sent a boat round to Rochester, and there I bought two hundred full-grown smelts, of which upwards of seventy died on their voyage round to Charlton. I sent one hundred by the Brighton Railroad to Hayward's Heath, and thence by a cart to Searles. Six were put into the ponds at Searles, and the remaining ninety-four reached Pilt-Down Pond safely. The pond at Searles is now full of large smelts, numbers have been taken out of it, and I eat of them when down there only last month, at which time they were full of roe. And what are supposed to be smelts, have been seen by my gamekeeper in Pilt-Down Pond in shoals; but I have not yet drawn a net through that pond—which, as you know, is large and deep—fine enough to take anything so small as a smelt."

## CHAPTER VII.

Fishing rights—Two Seasons—Size of Fish—The Fly—Spinning—Trout hooked foul—Single gut—Anecdote—Pike Fishing—Ide Fishing—Perch Fishing—Tragic Occurrence—Fishing List—Fishing at Trollhättan—Legends—The Rapids—Dangerous—The Silver-Lax—Trout Fishing—Salmon Fishing—Exciting Catch—Curious circumstance.

THE fishing in my neighbourhood was very good; better could hardly be found anywhere, not exactly on account of the actual quantity of fish to be taken in a day, but because fish of some kind or other were to be killed with the rod during the greater part of the year. Even in the depth of winter, provided the weather was mild, which happened at times for several consecutive days, sport with the rod was obtainable. On one occasion during the Christmas holidays, indeed, I

brought home a heavy basket of fish taken in the deep pools near to the house.

The fishing rights attaching to Ronnum were considerable; and through the kindness of several of the neighbouring proprietors, who made over to me their privileges, and by purchasing those of others, I, after a time, got a large portion of the waters thereabouts into my own hands; as prior to my settling in that part of the country, however, people had been accustomed to do much as they liked, the enforcement of these rights subjected me to considerable trouble and expense, and what was infinitely worse, brought on me, on the part of many, no little ill-will.

For several miles below Ronnum, the Gotha was somewhat sluggish; but from opposite to the house up to the Wenern, a distance of from two to three miles, the stream presented a succession of rapids and pools, in appearance the finest imaginable for angling.

Though some trout—and it was to this fish my attention was chiefly confined—remained in the Gotha all the year round, by far the larger portion left us in the early part of the summer, and ascended the stream to the Wenern, where they passed that season; and it was not, as I have said, until the autumn, that they returned to us.

As respected trout, therefore, we had two seasons—the spring and the autumn. The months of June and July, which in other rivers are usually the best months for angling, were to us almost a blank; for though we could always kill fish, a heavy basket was not at that time to be calculated on.

The fishing at Ronnum had also this singularity, that in the spring months good sport was generally obtainable in the rapids about the house; whereas in those near to the Wenern, it was then hardly possible to kill a good sized fish. But in the autumn, on the contrary, by far the larger portion of the fish were congregated in the upper rapids, while in the lower it was a rare event to take a large trout.

Our spring fish were far from being in such good condition as those taken in the early part of the autumn; partly because they had not fully recovered from spawning, and partly, it is to be supposed, because they had been on short commons during the winter. Those caught in the early part of the fall were, on the contrary, excessively fat, and were heavier by several pounds. In the spring we seldom killed trout much exceeding twenty pounds weight, but in the autumn a twenty-four or twenty-five pounder was an almost every-day occurrence; and we often took them still heavier. I myself, indeed, captured with the rod alone several of at least thirty pounds each.

It was remarkable that though during spring and autumn we took great numbers of small as well as heavy trout, few were met with of an intermediate size. This was more especially the case during the autumn. Our trout at that time weighed either from one to three pounds, or from ten to thirty pounds. I, therefore, came to the conclusion, that a large portion of those bred with us in the Gotha, either remained in the Wenern until well grown, or that they proceeded up its tributary streams in the north; and this idea was strengthened by the fact that ten to twenty thousand trout (called lax, or salmon), are annually captured at a fishery on the Clara River, in Wermeland, averaging about six to seven pounds each—the sized fish of which we saw so few in the Gotha.

It was observable that the larger and the smaller trout associated very little. Unless we more especially sought out the lesser in the shallower rapids, we might often, when trying for the larger fish, work for a whole day without taking a single one.

The fly succeeded well with the smaller trout, but not so well with the larger; partly, no doubt, owing to the depth at which the latter usually lie preventing them from seeing it; but as they took bait pretty freely, I, of course, gave the preference to spinning. Bait had besides this advantage, that, independently of trout, one was pretty sure to make a basket, with pike or other fish, which would not have been the case with the fly.

In some few of the pools and rapids about Ronnum, one could fish from the shore; but, generally speaking, owing to the nature of the ground, and the great breadth of the river, it was only with the assistance of a boat that much execution

was to be done; and as there was more than one insurmountable rapid on the river, I usually had a boat stationed at the head of each, so that by changing from one boat to the other, I could, in the course of the morning, fish to advantage the greater part of the river; and the ground and the scenery being thus diversified, tended greatly to enhance the amusement.

In calm weather I rarely had more than one boatman; but when blowing hard, especially if the wind was down stream, a second was generally required, as well in order that the boat might be under better control, as that in the event of hooking a heavy fish, and his taking up stream, we might be able to keep our proper place, not always practicable with a single pair of oars.

When one of the large trout was fairly hooked, he was usually landed in the course of ten minutes or a quarter of an hour. But this was greatly attributable to the advantage a boat gave us, and to the river in some parts being studded with islets or rocks, which afforded us ready means of landing ourselves, and gaffing him.

If, however, he was hooked foul, as not unfrequently happened, the chase might be long and arduous. I remember in one instance getting hold of a big fellow by the dorsal fin, in a rapid immediately near to the Wenern itself; but in spite of every effort on my part to stop him, he brought us more than a mile down the river. During the descent we landed on four or five different islets, in the hope of bringing him up, but so soon as sufficiently near to sight us, he was off again in double quick time, and we had only to follow in his wake as before. At last, however, he was all but beaten; but just as we were thinking of securing the prize, the hook lost its hold, and to our greater chagrin he sailed away uninjured!

But although the large trout, unless hooked foul, were commonly killed pretty readily, they occasionally gave us much occupation before we could call them our own; and this more especially early in the autumn, when the fish were in the highest possible condition.

One fine evening in the middle of September, for instance, just as the sun was sinking below the horizon, and the clock

in Wenersborg striking seven, I hooked from the boat a huge trout. I was fishing with single gut, my usual practice when the water was clear. With such fine tackle I could not, therefore, pull quite so hard at the fish as I otherwise should have done. Nevertheless, as night was fast approaching, I gave butt, as fishermen say, even to the endangering of my line. All would not do, however; for although he allowed himself to be led from islet to islet, and from one landing-place to another, I could never get him sufficiently near for the gaff to be used effectively. At length it became quite dark, and my people thinking the case desperate, advised breaking the line, and letting him off; but being resolved to see the affair out, even if obliged to remain on the river the whole night, I sent for a lantern, which enabled us in some degree to discern what we were doing. The fish, however, still stuck to the bottom of the stream, which thereabouts was very deep, and twice he got foul amongst the weeds; but by rowing round him, we were in both instances fortunate enough to extricate the line, and at length, after he had been hooked exactly three hours, we had the fish—a noble male Krok, weighing twenty-six pounds-high and dry on the strand. Had he fought for only a very few minutes longer, however, he must inevitably have escaped; for of ten hooks, only one, the liphook, remained, and even the lashing of this was partially torn away by the teeth of the fish.

Many people make quite a merit of killing a trout of a few pounds in weight with single gut; but by tolerable management, and with the aid of a boat and a skilful rower, single gut will hold a fish of almost any size. We frequently used nothing else, and caught great numbers of trout equally large as the one just spoken of. It is true that occasionally single gut has broken with me, and so has the best twisted gut; but in almost every instance this has arisen either from a flaw in the gut itself, its coming in contact with a stone or other impediment at the bottom, or that the gut has been frayed by the teeth of the fish. If the rod has proper play, and the fisherman does his part, almost any sort of tackle is strong enough to hold a fish of the largest size. When spinning in deep rapids, one runs the greatest risk; for being unable to see the curl of the fish as he takes the bait, it not

unfrequently happens that in the twinkling of an eye the line is going off the reel at railroad pace, when if not upon one's guard, or if the line becomes entangled, all is of course irretrievably lost.

A singular incident once occurred to me whilst fishing in the pools close to Ronnum. Observing at a little distance several large trout, plunging on the surface in pursuit of a shoal of young smelts, we rowed to the spot; when, casting the bait amongst them, one of the number immediately seized it with avidity; but owing to a flaw in my casting line, which was of the best twisted gut, it parted at the upper lead in striking the fish, and he went off, as I supposed, uninjured. was, of course, much annoyed at the mishap; but there was no help for it: so causing the people to put me on shore, that I I might repair the tackle, I directed them in the interim to proceed two or three hundred paces farther down the stream to the boat-house for other baits, those which we had brought with us being exhausted. They did so; and returning in about a quarter of an hour afterwards, jokingly asked if I should like to see the hook recently carried off so unceremoniously by the trout. I smiled, conceiving the thing an impossibility; but they produced, not only the hook, but the fish itself—a fine fellow of about sixteen pounds. It appeared that when rowing down stream, and when in very deep water, they saw him, evidently much distressed, and with his belly uppermost, plunging on the surface, when, having a large landing-net, they at once rowed to the spot, and placing it under him, lifted him on board.

I could never quite comprehend this matter, for the fish was fairly hooked in the mouth, and the weight of the leads was trivial; but I suppose the disabled state he was found in must have been caused either by the hook piercing both jaws, or that the casting-line had twisted about his gills, and thus prevented him from respiring freely.

A similar circumstance, but not attended with equally fortunate results, occurred to me at an after period, when fishing in the great pool immediately below Ny-Bro; for though the fish, shortly after breaking the line, was seen in an eddy in the like helpless state as the one spoken of, there

were no appliances at hand to secure him, and he therefore got off. This, however, was not so remarkable a case as the one mentioned, for I had played the fish for a considerable time before he escaped, and that in very broken water; and in addition to the leads, hooks, etc., he carried away a large portion of the line itself, which must of necessity have tended greatly to encumber his movements.

At times I had great sport with the huge trout. Independently of other fish, I on two or three occasions captured seven, and on several occasions six of these fish within the day, weighing one with another sixteen to eighteen pounds.

One particular season I took twenty in the course of four consecutive days (and what is singular, no others in that time, to my knowledge, touched the bait) that weighed together four hundred and fifty-two pounds, which is upwards of twenty-two pounds each on the average. Their large size was accounted for from their being not only in high condition, but all males, which, as said, are considerably larger than the females.

The fish last mentioned were taken in the upper rapids, where the heavy trout chiefly congregated during the autumn; and this being the case, I was, therefore, accustomed at that season to make Källshaga—situated on the left bank of the Gotha, above a mile from Ronnum—my chief fishing station in the fall of the year.

A friend resided here; but the house, or rather cottage, is so embosomed amongst trees, as to be but little perceptible either from the river, to which it is immediately contiguous, or from the high road leading from Ronnum to Wenersborg, that passes at no great distance in its front; and as the distance from home was considerable, myself and friends were accustomed, when fishing at Källshaga, to take provisions along with us, and to enjoy our humble meal beneath the shelter of an umbrageous oak, of which there were several in the park-like, though exceedingly limited grounds.

The Pike fishing at Ronnum was good, especially during the first few years of my residence there, and I occasionally captured a good many; but in general they were somewhat small. The largest I myself ever took did not weigh above seventeen pounds, but my people captured two or three of twenty-five pounds.

We also killed some Ide—an odd one occasionally when spinning for trout or pike, but chiefly with the fly.

This fish does not rise to the fly in the same free manner as the trout or the grayling, but sucks it, as it were, into his mouth. This being the case, when angling expressly for the ide, we moved the fly—always a rather large one—very slowly; and the better to conceal the hook, as well as to tempt the fish, we usually affixed to the point of the hook a maggot, or what was preferable, a large grasshopper, or black beetle, divested of its wings. The fly, however, could not be used to advantage excepting when the weather was fine, warm, and calm, as at such times the ide is to be seen in shoals near to the surface; for if, on the contrary, the weather is cold and boisterous, these fish always remain in deep water, and, as a consequence, it is next to an impossibility to induce them to take the fly.

When fishing from a boat for the ide, as was our custom, the boat's head was always kept up stream, and whilst the fisherman, who stood in the stern sheets, cast the fly to the right and left, the boat was allowed to drop slowly and quietly with the current, so as not in any manner to disturb the water below.

Considering this kind of fishing rather tame, I rarely engaged in it, but occasionally allowed my man to amuse himself, and who thus did considerable execution. At times, indeed, he would take twelve or fifteen ide in the course of a few hours.

One season in particular we captured one hundred and fifty of these fish, the average weight of which was near three pounds each; and had we devoted ourselves to the sport, we might probably have trebled that number.

Perch were tolerably plentiful in my immediate neighbourhood. When spinning for trout or pike I occasionally caught one, but I never regularly angled for those fish. My people, however, not unfrequently killed a good dish. But the perch fishing in the Wenern was by all accounts much better than in the Gotha. An experienced fisherman, a friend of mine,

living near to the northern shores of that lake, states that on some occasions, especially about midsummer, two persons, fishing from a boat, may take with the rod alone in the course of three or four hours, fifteen to eighteen lispund—that is, from three hundred to three hundred and sixty pounds weight of those fish.

When perch rove about in shoals near the surface, in pursuit of small fish, as is the case in the height of summer, the most execution is to be done; for by backing the boat warily and slowly (with muffled oars all the better) in the wake of the shoal, it is the fisherman's own fault if he cannot make a good basket.

In one instance, and this was immediately near to the house, my man, who at the time was fishing for ide, observing a shoal of perch thus roving about, captured ten or eleven pounds weight of perch in about half an hour with no other bait than a large blue fly.

The heaviest perch that we ever killed at Ronnum did not weigh more than three pounds; but it was said that some were to be found weighing five pounds each.

A skilful boatman was very necessary when fishing among the rapids of the Gotha, as in such situations the slightest mismanagement might have jeopardized us. Though on several occasions nearly meeting with an accident, we always escaped. Once, indeed, owing to the inadvertence of the man, we were within an ace of being carried under Ny-Bro, in which case, from the force of the current, and the terrible eddies in the pool below, the chances would have been much against us.

Though not very frequently, accidents did occur once now and then, and in my time several individuals were drowned; amongst others, two poor young women in the service of a family resident near the banks of the river. It was in the middle of summer, and they had gone, as was their custom, to bathe in a shallow hard by the house, when by some mischance they were swept away by the current. A boy tending, cattle in the neighbouring pasture, hearing their cries, hastened to the spot, but one of them had then sunk altogether, and the other, supported apparently by her clothes, was floating down the rapid; but there being no assistance at hand, she

also was presently engulphed. One of the poor creatures could swim a little, and it was believed that in her endeavours to save her companion, she herself lost her life. I was not far distant at the time, and as soon as intelligence of what had happened reached me, hastened to the spot; but though we searched the river and its banks far and near, nothing was to be seen of these unhappy young women; and it was not until some days afterwards that their bodies were found in a pool below.

To give a better idea of the fishing at Ronnum, I subjoin a list of my individual performances with the rod during one particular season. Two or three other seasons, however, were almost equally good; but this list is independent of fish taken by friends or by my fisherman, the weight of which was about as great. It is farther to be observed, that following the custom of the country, we classed the smaller trout, or those weighing a pound or two, as Öring, or trout, and the larger, or those of from eight to ten pounds or upwards, as Lax, or salmon; as also, that the weights were Swedish, which are about six per cent less than ours.

Fish.								lbs.
120	heavy Trout (Lax),				-	-	-	1796
<b>7</b> 5	smaller Trout (Öring),				-	-	-	201
15	Perch,	-	-	-	-	-	-	15
364	Pike,	-	-	-	-	-	-	827
1	Pike-pe	erch,	-	-	-	-	-	4
5	Ide,	-	-	-	-	-	-	21
580								2864

But as respects fishing, it is not likely Ronnum will ever again see those palmy days, for the waters thereabouts are now either open to every one, or insufficiently protected; and, what is worse, where there was formerly a single fisherman there are now multitudes.

To relieve the monotony of always fishing at home, I at times made excursions to Trollhättan, mentioned in my former work, which was about seven or eight miles distant. To say nothing of the chances of sport, the magnificence of the Falls, and the surrounding scenery, which one could never tire with looking on, were themselves inducements enough for the trip.

The very name of Trollhättan has, moreover, its own romance; for by the ancient Northmen it was assigned as the abode of the descendants of the Troll and the Älfvor, beings much more wicked than other men.

The traditions connected with Trollhättan are innumerable. Here, on the Klipp-holmar, champions in heathen times were wont to decide their quarrels by single combat. The famous Starkotter, renowned over the whole North for his feats in arms, dwelt in the vicinity, and fell in love with the beauteous Ogn Alfafoster. The maiden, however, preferred Hergrimer, and Starkotter therefore challenged him to mortal combat. They fought by the side of the Fall, and Hergrimer was killed; but Ogn rushed forward, seized the bloody sword of her betrothed, and exclaiming: "Though thou hast slain my beloved, thine will I never be!" plunged it into her own breast.

On the western side of the Falls, again, is pointed out the Skrāddare-Klint—that is, the Tailor's Cliff—or rather the spot where the beetling rock once stood, for in 1755 this mass fell into the raging torrent beneath.

"In a profound cavern near to this cliff," so goes the legend, "dwelt in olden times a band of robbers, who during one of their predatory excursions, made prisoner an unfortunate tailor; but being at the moment in merciful mood, they promised him life on the very singular condition that, whilst sitting on the outermost point of the cliff, and with his feet hanging over the very Fall itself, he should sew a complete suit of clothes. The poor tailor accepted the proffered terms, and so nearly completed the habiliments, that only the trackeltråd, or basting-thread, with which they were first tacked together, required to be withdrawn. Up to this time he had refrained from looking downwards; but now, and whilst in the act of pulling out the loose stitches, curiosity got the better of his prudence, and casting his eyes on to the surging waters beneath, his brain reeled, and quitting his hold, he was instantly precipitated into the horrible abyss!

"For a long time this retreat of the robbers," says the legend, "remained undiscovered; but at length a maiden, whom they had seized during a foray, and detained in captivity, betrayed them; for one day, during the absence of the band, she purposely lighted a fire at the cave's mouth, the smoke of which having been seen, search was made, the outlaws taken prisoners, and soon afterwards they expiated their crimes on the gallows."

At Trollhättan there is a tolerable fishing both above and below the Falls. As far as the sport is concerned, the best perhaps is above, for there not only trout, but pike, etc., are taken, which is not often the case below.

Near to Stallbacka, about two miles above the Falls, there are some very good rapids, where a dish of trout—more especially in the spring of the year, before the fish are on the move for the Wenern—is almost always obtainable; and owing to the water not being generally deep, one succeeds nearly as well with the fly as by spinning. One day, in the middle of April, I here killed six trout, weighing together about sixty pounds, all, with a single exception, of the species called Silfver-Lax.

Though we occasionally took that beautiful fish in the waters about Ronnum, it was to the rapids in question that he seemed chiefly to confine himself, which circumstance, coupled with the vicinity of these rapids to the Falls, almost inclined me at one time to think that the Silfver-Lax might be a visitor from salt water.

From the Stallbacka Rapids downwards, there is no very good fishing, the water in general being too deep, not only for fly, but for bait. On one occasion, however, a little above Trollhättan, I killed a trout weighing seventeen pounds.

With the exception of smaller fish in the eddies near to the shore, nothing is to be done immediately above the great Falls. It is rather nervous work indeed, fishing here, for the stream resembles a mill-race, and the slightest inadvertence might cause serious consequences. When trying my fortune I had always a pair of sculls, which rendered the chance of an accident much less likely.

Sven, one of my followers on these occasions, greatly dis-

tinguished himself here. A woman, crossing the river in a punt a little above the Falls, let one of the oars slip from out her hand, when the craft, being rendered unmanageable, certain destruction stared her in the face. Her shrieks having, however, attracted the attention of Sven, who was standing on the adjoining shore, he, without a moment's hesitation, and at the imminent peril of his life, pushed off in a skiff to her rescue, and was happily in time to save the poor creature from the horrible fate which threatened her.

This fine fellow—who, for his gallant conduct on the occasion in question, received a mark of public approbation—died quietly in his bed at an advanced age.

Not so, however, Magnus, another of my Trollhättan comrades, and a thirsty soul; for one fine night, when descending the river alone from Stallbacka, he managed, as it was believed, to drop asleep, when his boat getting into the force of the current, was quickly carried over the Falls; and though surmised, it was not until his body, mashed to pulp, was found some days afterwards in one of the pools below, that the fate of the poor man was certainly ascertained.

Though better sport is probably attainable above the Falls, still, from the magnificence of the scenery, the vast and profound pools below were my favourite haunts.

In former times the sport was really superior here, and many a good basket of fish have I made; but of late years it has greatly fallen off. One reason for the diminution of the fish is, that the disciples of Isaak Walton have increased tenfold; another, that in former times only the fly and the worm were used; whereas, at the present day, every one has taken to spinning, which, from the nature and depth of the water, proves much more destructive to the fish.

As salmon do not make their appearance at Trollhättan until after Midsummer, the only fish to be caught in the early part of the season in the lower pools, are trout. These consist almost exclusively of the Wenerns-lax, the species so common with us above the Falls. The Silfver-lax was here very rare indeed.

The trout below the Falls were not to be compared in size

with those above. I have heard of a sixteen-pounder being speared under the saw-mills; but I myself never killed one of more than twelve pounds in weight, and that was considered an unusually heavy fish. In general, indeed, they are here very much smaller; attributable, probably, to the Falls confining them to situations where they are exposed to constant persecution, and as a consequence no time allowed them to arrive at maturity.

Though in the pools in question the trout are not remarkable for size, salmon are very large there. I myself never killed one exceeding twenty-five pounds, but I have hooked much heavier fish.

But salmon fishing at Trolhättan, even when the season is at its height, is very poor. One is just as likely, indeed, to return home empty-handed, as to kill even a single fish. This is attributable to the paucity of their numbers, the great depth of their runs, and the almost impossibility of obtaining access to the best casts. And even should one succeed in getting hold of a heavy fish, the nature of the water and the banks of the river are such, that the chances are about equal as to his capture or escape.

One autumnal evening, for instance, I hooked a salmon near to the fishery, in the lowermost pool on the eastern side of the As long as he remained in comparatively smooth water, I did pretty much what I pleased with him; but at length, either his own will, or the current, carried him into the roaring torrent below the cataract itself, down which he was hurried at racing pace. Presently, however, the eddy swept him back into the pool, of which he made nearly the circuit. By this time he had carried off very considerably more than one hundred yards of line; and as the stream now brought him towards me, I was obliged to take the line in by hand, instead of reeling it as usual, that I might retain proper command over him. As the fish, on this his return voyage, swept past the rock, my atttendant, who was on the watch with a very long gaff, not only adroitly succeeded in plunging the weapon into his body, but threw him high and dry upon the rocks. Unfortunately, however, these were steep as well as slippery, and before the man could possibly secure the fish—apparently a twenty-pounder—he floundered back into his native element.

The hook, however, still retained its hold, and the salmon subsequently made two more circuits of the same pool, but never again approached the shore near enough to give us a second chance. Finally, he took up his position under the cascade itself, and within a few paces of where we stood; but my patience being by this time somewhat exhausted, and as night had closed in upon us, I directed my attendant to cast heavy stones into the water, round and about the spot where we supposed the fish to be lying. This at length had the effect of starting him off; but instead of descending the torrent as before, he dashed directly across it, when the line snapped like a piece of thread; indeed, a cable in such a situation could hardly have held him.

Had success crowned our efforts, trivial evils would not have been regarded; but what with loss of tackle, hands bleeding in several places from the friction of the line, rod so strained as to be irretrievably spoiled, it can readily be imagined that my reflections on the way homewards were anything but agreeable.

When fishing at Trollhättan with a long day before me, it was my custom, after crossing the river above the saw-mills, to follow the several pools downwards to the still water below. Here I recrossed the river, and facing homewards, tried on the way all the likely pools. Thus I had abundant occupation for a whole day; and by going over so much fresh ground, was pretty sure to make up a basket before night.

Though there may not be much hazard in thus following, in all their meanderings, the broken and jagged banks of the river, yet it cannot be denied, that when a heavy fish is hooked, and one is necessitated to follow where he leads, be the rocks as steep and slippery as they may, and the pace a sharp one, one risks falling into the torrent, whence extrication is hardly to be hoped.

When on these fishing excursions to Trollhättan, I occasionally borrowed a boat in a still water below the pools, and dropped down the river to Åkerström, a distance of a mile or

more, where there is a very fine rapid, as also a sluice to facilitate the passage of ships.

This rapid, in the season, is never without salmon, and those of the largest size—fish of forty to fifty pounds, being by no means uncommon. It is asserted, indeed, that at times they are taken still heavier.

Spinning succeeds tolerably well here; but from the depth and rapidity of the stream, nothing is, I imagine, to be done with the fly. I, at least, could never succeed in raising a fish by that means, and I have tried flies of all sizes and colours.

Though salmon may occasionally be taken below the rapid in question, the only really good place for the rod is in the smooth water immediately above, where with a long and heavily leaded line, one crosses the stream backwards and forwards in the manner of trolling. When the fish strikes, one should keep directly above him, and endeavour, if possible, to draw him up the river; for though one may with perfect safety follow him down the rapid—in appearance quite sufficiently formidable, by the bye-yet what with the line necessarily slackening during the descent, the chances are equal as to his capture or escape. One should also be careful to have him well in hand, for if there be too much line out, and that he suddenly crosses the stream to the right or left, the pressure of the current on the curve of the line is such as leads one to suppose he is on the way down the rapid. This happened to me on one occasion; but when I reached the back water below, conceiving all the time the fish was in company, I found, to my mortification, I had left him behind me, and as to ascend the rapid again, excepting by the neighbouring sluice, was an impossibility, the line, as may be supposed, quickly separated.

I have not fished often at Åkerström, and never had much sport, my largest salmon not exceeding twenty-five pounds. But other fishermen have been much more fortunate, as well in respect to numbers, as to the size of the fish. Last summer a peasant took a salmon by spinning, that weighed, it was said, thirty-eight pounds.

Twelve or fourteen miles lower down the Gotha, at the hamlet of Lilla Edet, are other rapids, or rather cascades,

where salmon in the season are very plentiful. But owing to the nature of the water, and to the Dref-garn being constantly at work during the day as well as the night, I do not imagine much is to be done either with fly or bait.

Three or four years ago a curious circumstance occurred at Lilla Edet. A man was rowing quietly across the stream, when of a sudden an immense salmon, that had been disporting himself in the air, fell headlong into the boat, where he was quickly secured. The prize was valuable, for the fish—which afterwards found its way to Gothenburg—weighed no less than forty pounds.

## CHAPTER VIII.

Salmon and Trout Fishing—Sometimes too good—Rivers exceedingly numerous—The Bothnian Rivers—Casting the Fly 100 feet—Rod Twenty-four feet—Vast numbers of Salmon in the Loga—Rising freely in the Ätra—The Save—The Glommen—Salmon plentiful in the Drams—One hundred and eleven fish in three days—The Torresdal and the Topdal—Good Fishing in the Gula and the Nid—The Namsen one of the best rivers—Salmon large and numerous—Especial tackle required—Good Fishing in the Alten—The Tana and the Patsjoki—Trout abundant all over Scandinavia—Hundreds of rivers.

SALMON abound in all the Scandinavian rivers, from the extreme south of Sweden to the North Cape; and should a man gain access to streams of note he may meet with amusement to satiety.

"Sometimes," writes Sir Hyde Parker, "I have had so much sport with salmon as to occasion indifference whether I fished any more for a week. This I do not hold to be good. To enjoy sport thoroughly, a man should earn it, as you do your bears. But at the present day, it is not altogether an easy matter to command a first-rate stream. In Norway"—and

he might have included Sweden—"every man is now a fisherman, and many of the waters are hired, so that it is difficult to get a cast to yourself; and I consider the game nearly up, at least for an old one like myself, and not worth going the distance. There are few flogging rivers, all dragging, which levels all, and skill avails nothing."

From actual experience, however, I myself cannot say much as to the properties of the Scandinavian rivers in respect to salmon fishing. It is true that on first pitching my tent in the peninsula, I wetted a line in several, as well in Sweden and Norway, as in Lapland. But the season not being sufficiently advanced, my sport was nil; and at an after period, having fair fishing at home, it neither suited my pocket nor my convenience to take extended journeys. For the information of the disciples of Isaak Walton, I will, however, jot down a little I know of the northern rivers. And to make the subject the clearer, I will take them in something like regular order, commencing with those on the eastern coast.

Here the rivers are exceedingly numerous, more especially towards the north. One of the most striking features of this part of the country indeed, is the number of streams that, descending from the alpine barrier separating Norway from Sweden, flow into the Gulf of Bothnia. In journeying from Stockholm to Tornea, a distance of from six to seven hundred miles, I counted, if I mistake not, considerably upwards of one hundred; many of them, such as the Dal, the Umea, the Piteå, the Calix, the Ljusna, the Torneå, etc., of great magnitude; and some, moreover, navigable to a considerable distance into the interior. This deluge of waters, considering that the country whence they take their rise is of no great extent, always greatly puzzled me. But though the rivers in question are thus numerous, and in most instances abound with salmon, a notion prevails that, from some cause or other, the fish frequenting them will take neither fly nor worm.

"As to the Bothnian Gulf side of the country"—such are the words of Mr. C—— (a good authority on fishing matters), in a note to me, dated the 29th of September, 1851—"I was last year one of five rods who tried many rivers between Stockholm and Tornea; amongst the rest, the Elf-Karleby and

the Ljusna—both magnificent rivers, and finer than any I have seen in Norway—but not one of us killed a fish. My brother tried trolling, but with not better success. Large trout and charr took salmon flies well." In a subsequent letter, Mr. C——says: "We met two more Bothnian martyrs—Messrs. Stanley and S——, at Trollhättan. They, like us, did not see a fish. They mentioned another man, H——, of the Scots Greys, who made a failure like the rest of us."

"I have tried most of the rivers in the Gulf of Bothnia," writes Mr. Richard Dann, also a very good authority, "and have killed a few salmon; but as far up the rivers as they could make their way for falls. My belief is that although one may occasionally hook a fish, there is no salmon fishing in these rivers."

Several of my other friends testify to the same effect; amongst the rest, Mr. Oscar Dickson, who has resided for several years near to the Njurunda, one of the most magnificent of the Bothnian rivers, and who has fished the greater part of them. If the salmon in the Bothnian rivers will not generally take fly—and from what has been stated such would really seem to be the case—it is a very curious fact, and one well deserving the attention of the naturalist. The only attempted solution of the mystery that I ever heard is, that the fish in the rivers in question may not be the genuine Salmo Salar, but a huge trout, greatly resembling it in appearance.

The salmon in the Bothnian rivers run large. "Those in the Ljusna," writes Mr. C——, "must average some thirty pounds. Many were killed in nets whilst I was there; the smallest of them that I saw weighed eighteen pounds, and a forty-pounder was a common fish." "More are caught," says Mr. Dann, in corroboration, "above fifteen pounds than under."

The eatable qualities of the Bothnian salmon would appear to be somewhat inferior. "Their flesh is coarse," Mr. Dann goes on to say, "and not nearly so well-flavoured as in the rivers running into the North Sea and Cattegat."

From what has been said it would appear questionable whether sport be obtainable with the rod in the Bothnian rivers. But should the salmon fisher direct his steps to the opposite

side of the peninsula, he cannot fail of finding amusement. Starting from the Sound, the first river of any magnitude that one meets with is the Ronne, near to the town of Engelholm; but never having heard of any person killing more than a few fish in the stream, I am inclined to believe there is not much to be done there with the fly. The Laga, flowing past the small town of Laholm, is the next river in succession. It abounds with salmon; and as for some three or four miles from the sea upwards, there are neither weirs nor other obstructions to impede their progress, and splendid rapids in the intermediate space, a better stream for the rod can hardly be found.

On one occasion I tried my fortune in the Laga, but partly owing to the season not being sufficiently advanced, and partly to want of skill, I returned home empty-handed. I, however, saw two noble salmon captured by the peasants, of whom there must have been about twenty occupied in fishing. So beautiful a line as some of these men threw, I had never before witnessed in my life. It was asserted there were individuals who could cast the fly one hundred feet! The distance was at all events very great, and nearly as far again as a crooked lane-rod enabled me or my man, who was a very fair fisherman, to cast mine. I must say I never felt so small in my life, as when exhibiting in the presence of these boors.

The rod used by them—which was of extraordinary length, say from twenty to twenty-four feet, and consisted of an aspen pole, topped with a sprig of juniper, or other pliant wood—beat mine hollow in another respect; for being solid, it served the purpose of a staff when wading, as was the practice, owing to the river in places being broad. At the time of my visit to the Laga, that river was open to every one, and vast numbers of salmon, five to six hundred according to report, were killed there annually with the rod alone. The proprietors of the several fisheries situated on the stream, not admiring this wholesale destruction, protested against the use of the rod; and by a legal enactment it was for several years strictly forbidden to every one, not excepting the owners of the water. But this prohibition was rescinded last autumn, so that the rod is again permitted as before.

The Laga is not a very early river. I was given to understand, indeed, by Mr. Westberg, who rents a fishery there, that good sport is seldom obtainable until after Midsummer.

We have then the Nissa, a rather large river, flowing past the town of Halmstad. But as salmon weirs span its whole breadth near to the sea, the fish are debarred access to the rapids above; and therefore little or nothing is to be done with the rod. The Nissa is a rather early river, and the salmon run tolerably large. Numbers are smoked and sent to Gothenburg and other towns, where they are in much request.

The Atra, at Falkenberg, the next river of consequence, is of great celebrity amongst fishermen, salmon being not only numerous therein, but rising very freely to the fly. The great drawback in this river is that the rapids are of limited extent, so that unless the fish are on the run from the sea, which during droughts is not always the case, the fishing is soon exhausted.

A young friend and myself, for instance, visited the Ätra some years ago. Between a late breakfast and an early dinner we caught seventeen salmon, or grilse, weighing together near one hundred pounds; but in the afternoon of the same day, instead of something like doubling that number, as we had anticipated, only a single fish was killed. Indeed, during our stay at Falkenberg, which was not protracted, the sport fell off from day to day.

The Atra, which is at present rented, is an early river; and fishing is, at times, to be had there even in April, during which month, and that of May, one meets with the largest fish. Towards autumn, few others besides grilse are to be killed.

The Viska is the next river. But here, as at Halmstad, there are weirs below the rapids, so that though one may perchance kill a salmon, anything worthy to be called sport is not to be anticipated—so long, at least, as the weirs remain uninjured—for, as with other rivers, these are not unfrequently carried away by floods, or are wilfully destroyed, in which case one may meet with good fishing in the upper part of the stream. The Viska, like the Ätra, is an early river, and the fish are pretty large.

We have then the Save, a stream of no great magnitude, flowing into the Gotha, a mile or two above the town of Gothenburg. Some years ago there was good fishing in the Save. One day, with the aid of the proprietor of the fishery, who occasionally took a cast with my rod, I killed six salmon, weighing, one with another, sixteen to seventeen pounds, besides losing two equally large. But a weir now crosses the stream below the rapids, so that only a stray fish can pass, and little or nothing is therefore to be done with the rod.

The river (whose name I forget) at Qvistrum, a hamlet situated a few miles to the northward of the town of Uddevalla, is the next in order. As far as appearances go, this is as nice a stream for fishing as one would wish to see; for within the space of three to four miles from the sea upwards, there are half-a-score or more of fine pools and rapids well calculated for the fly. But nets, unfortunately, are constantly at work, and one has therefore little chance of much sport. On the two or three occasions of my visiting this river, indeed, I hardly killed a fish.

Crossing the Norwegian frontier, we come to the Glommen, a noble river, emptying itself into the Christiania fjord, near to the town of Fredrikstad. Salmon are, I doubt not, abundant in this river; but as I never heard of any one meeting with much success, I conclude the localities must be unfavourable for fishing. Independently of other considerations, the quantity of timber usually seen floating on the surface, in the earlier part of the season at least—an evil, as concerns the angler, common to many of the northern rivers—must be a great obstacle to sport.

The next river of moment is the Drams, flowing past the well-known town of Drammen, which, like the Glommen, empties itself into the Christiania fjord.

Salmon are plentiful in this river, and numbers are captured at an established fishery near to the hamlet of Högsund, situated at twelve to fifteen miles from the sea, where a somewhat precipitous fall impedes the further progress of the fish. But as with the Glommen, the localities are not very favourable, and I never heard of much being done there with the rod.

Once when on a journey, I stopped at Högsund for a couple of hours; but though I tried the pools below the falls with moderately good flies, and there was abundance of fish at the time, I had not a single rise. It was, however, somewhat early in the season, and the freshes not altogether run off, which might partly account for my ill success.

We have next the Laugen, at Laurvig, a considerable stream, and, by all accounts, a first-rate one for the rod:—
"We made an excursion some days since to a fall four Norwegian miles up the river," so wrote Sir Hyde Parker to me, "when in three days Colonel Eyres and myself killed one hundred and eleven fish—some of them thirty-five, and one forty pounds. But the half of them were brown, and must have been of the tribe which passed up in June. Mr. Proby went afterwards, and in one day killed fourteen, and was then stopped by rain, and consequently thick water."

Other friends of mine have also had good sport in this river. "We are now under weigh for Russia," writes Captain Petre to me, "having been staying a fortnight at the falls of the Laugen, and have killed ninety-seven salmon—the eight largest from nineteen to twenty pounds; the remainder—thirteen, nine, eight, down to four; and we should have killed a good many more, but unfortunately B—— was confined with a bad knee the last six days, and is still completely disabled. I caught the last few days twelve, eleven, and nine salmon a day."

The Laugen is an early river, as regards the lower portion of it at least; for at the rapids spoken of by Sir Hyde Parker, which are at some distance in the interior, the fish do not appear until the season is somewhat advanced. A considerable portion, if not the whole, of the fishable parts of the Laugen, are now, I believe, rented.

The Nid, on which the town of Arendal is situated, is the next river of consequence; but never having heard of any one being very successful here, I doubt, its being a good fishing river.

We have then the Torresdal and the Topdal, falling into the sea near to Christiansand, both of which are in repute amongst salmon fishers. "The Torresdal," writes Mr. Henry Newland, "is not much smaller than the Gotha, very bright and very rapid, but not a first-rate river for the fisherman; for from the great falls to the sea it presents one unvarying descent without pools and rapids, a strong and steady stream setting regularly down it. There are three or four flats, where fish rise in from eight, or more, to six feet of water; and near the falls there is a good deal of likely-looking water, and a few roughs. There are few places where you can fish without a boat, but the falls are so perpendicular, that the fish cannot get above them. It is a late river, and contains a good many fish, but they are small. Large flies of dull colour and little tinsel."

"The Topdal is a much smaller river than the Torresdal, dark and still. Fish are to be caught at the mouth, and at the falls three miles up, but nowhere else. This stream does not require a boat, and has but little fishing-ground, but there are more fish in it than in the other river. (Silk flies on C C hooks, or even smaller; bright colours). These fish are very poor eating, whereas the Torresdal fish are the best I have met with. It is an earlier river than the Torresdal, and not so much affected by floods; but dry weather injures it much."

The Mandal, which discharges itself into the Cattegat, or rather into the Sleeve, at about thirty miles to the south-west of Christiansand, is also in much repute for the rod. Mr. Newland, when speaking of it, says: "It is an earlier river, and I suspect better than those at Christiansand, but we were too late on it. It is larger than the Topdal, and smaller than the Torresdal, and contains five good stations, but they are a good way apart—from the first to the last, five Norwegian miles. The water is slightly tinged. I did not catch enough fish on it to tell to a certainty the flies, but I should say fur bodies, mixed wings, and B or B B hooks. Many parts of this river may be fished without a boat."

There are two more rivers in this vicinity, but they are of little use except during a wet summer. "Speaking generally of this part of Norway," Mr. Newland farther remarks, "I should not come here again. The fish run small; the largest

we caught was under thirteen pounds." Others of my friends, however, look upon the rivers in question in a much more favourable light. Sir Hyde Parker has, indeed, met with very considerable success in more than one of them.

And I have heard of a countryman, Mr. L—, having done wonders hereabouts. Report says he one forenoon took thirty-five salmon with the fly; and that had he not broken his arm or collar-bone by a fall, he would certainly have landed fifty at the least by the evening. But whether this success was achieved in the Mandal, or in the rivers near to Christiania, I am in ignorance. Of the rivers hence to Stavanger, I know nothing farther than that Mr. Francis Cholmeley, in a letter to me, says: "From Mandal to this place the whole country is full of fine streams, abounding with trout, and a good many of them with salmon."

I am also much in the dark as to the rivers on the western coast of Norway, up at least to the 62° or 63° of latitude. But as I never heard of anyone having been very successful hereabouts, I am inclined to believe they are not generally favourable for salmon fishing.

If this is really the fact, may it not be in consequence of their descending, in many instances, directly from glaciers, or from mountains covered with perpetual snow; or that from the land rising so precipitously from the sea, their course is too rapid to afford a fair field for the rod? Such at least appeared to me to be the case with the streams near to Ej-fjord in the Bergen district, which I once visited, though not on a fishing excursion. Beyond the latitude mentioned, however, the fisherman will meet with rivers that can hardly fail to reward his exertions. After crossing the Dovre-fjeld, the first of any great note that he meets with is the Gula, which falls into the Drontheim fjord. This is a considerable river, and in high reputation with salmon fishers. Several of my friends have done much execution there; amongst others, Captain Greene, of the Royal Navy. He favoured me with an account of his performances, but unfortunately the memorandum is lost. Mr. Fosbrooke has also been very successful in the Gula. I am unacquainted with his performances during other seasons, but in that of 1843 he killed, he told me, seventynine salmon, the largest of which weighed twenty-eight pounds.

The Gula was formerly an open river, but at present, like many other Norwegian rivers, it is rented, and, as I understand, for a series of years. We have then the Nid. which also empties itself into the Drontheim fjord. This fine river is of great celebrity, and much execution has at times been done in it by our countrymen. "Mr. Overston, the owner of the fishery," says Mr. Charles Royd Smith, "took in our absence eleven good salmon in three hours with the fly, which was great work." The Honourable Richard Hutchinson, a firstrate fisherman, and amongst the most successful who have visited Scandinavia, also testifies to the abundance of the fish in the Nid. "One day," so he writes, "Mr. Overston and I killed from the same boat either nineteen or twenty fish, nine of which fell to my share. One weighed thirty-eight pounds, a second nearly equalled him, and none of the rest were under twelve pounds. I need not say all these were taken with the fly."

The next river of any consequence is the Steenkjær, situated at about two days' journey to the north of Drontheim. Though, owing to the rapids being somewhat limited, and to sunken and floating timber, this river is spoken of rather disparagingly by some; yet there are those of our countrymen who have here enjoyed good sport. If report speaks truly, Mr. Buckle captured in about a month eighty salmon, averaging fourteen pounds each; and Messrs. Rogers and Hunt, during the same or following year, took no less than two hundred and six fish, in the course of twenty-six days.

I am told that there is a small pool immediately under the Falls at Steenkjær, where the miller killed with the fly one hundred and fifty salmon in the course of a month! Up to a late period the Steenkjær was an open river, or at least permission to fish was readily obtainable from the proprietor; but it is now said to be rented, and for a term of years.

About one hundred miles beyond the Steenkjær is the Namsen, by all accounts about the first river in Scandinavia for salmon fishing, as well in regard to the abundance as to the size of the fish. And as the rapids and roughs, with intermediate pools, extend for miles together, there is, of course, room for several rods.

"The largest salmon I have caught was in the Namsen," says Sir Hyde Parker. "He weighed sixty pounds, being exactly four feet long, and was the largest fish of any kind I ever caught; indeed, I have never seen one caught of greater weight. I caught nine others that day—one of forty, one thirty, one eighteen, one fifteen, the rest from eight pounds downwards."

"We remained in the Namsen about a fortnight," writes Mr. Dann, "and killed ninety-five salmon; but the weather was so bad that several days we were unable to fish. The largest, of which I was the fortunate captor, weighed forty-five pounds. He broke the third joint of my rod at the first dash, and I was an hour and three-quarters in killing him with the remaining joints. Cholmeley caught the second best, weighing thirty-five pounds. Between that weight and twenty-five pounds we killed thirty fish. The first day we caught twelve, Cholmeley and I, Hutchinson not fishing. It really is the best river I have ever seen; such monster salmon are found in no other."

"I never remember having had a blank day on the Namsen," says Mr. Hutchinson. "In this river the salmon run to an enormous size. One of my friends (alluding to Mr. Dann) killed a splendid fish of forty-five pounds. I weighed it myself. I one day rose from forty-seven to fifty salmon, I forget the exact number; of these I hooked nineteen, and killed nine. The largest was thirty-seven pounds, then came one of twenty-seven pounds, and none were under fourteen pounds, with the exception of one of four pounds. Unfortunately, I fished that day with a hook of, I think, very bad shape; but for this, I am confident my day's sport would have been unequalled."

"In reference to our conversation last night," writes Mr. C—, under date the 29th of September, 1851, "I find by my fishing-book that I killed in the Namsen three hundred and twenty-three fish, weighing three thousand eight

hundred and forty pounds, and was obliged to leave the water for want of tackle. I was on the river from the 15th of June to the 8th of August. Of the above fish eight were over thirty pounds, and three of the eight above forty pounds. I lost one monster, such as I shall probably never see again.

"Mr. Owen," my friend went on to state in his note, "fished in the Namsen the same year, and killed a great many salmon—one in particular, that weighed a good fifty pounds; but before this point could be ascertained, it was needful to cut the fish in two, and then to weigh the halves separately."

Sir Charles Blois has probably been more successful than any one else in the Namsen. He killed, as he himself told me, three hundred and sixty-eight salmon, weighing together five thousand two hundred and fifty-two pounds, which on the average would be some fifteen pounds each.

Owing to there being but few casts from the banks, the Namsen can only be fished to advantage out of a boat—by trolling, as it were, which some consider rather tame work. People visiting this river must be well equipped. "The Namsen," writes a friend, "requires different flies and tackle to any other river, and any one coming out with English ideas will be woefully disappointed. The salmon will break all ordinary tackle, running out frequently one hundred and fifty yards of line." The fishing-rights of the whole or the best portions of the Namsen are now in the hands of our own countrymen.

Beyond the Namsen, and between it and the Alten, innumerable rivers empty themselves into the North Sea, all or most of which abound with salmon; and though many have doubtless been visited by yachtsmen and others, I myself am in much ignorance as to their fishing capabilities; with the exception of the Mons and the Malanger, near Tromsöe, which Mr. C——, who was fishing there last summer, describes in glowing colours—as "quite good enough," to quote his own words, "for any one who has not been spoiled by the Namsen." But the great drawback to these rivers is, that from being situated near to the ice-peaked mountains, "they are not fishable," according to that gentleman, "before the 20th of

July, and are probably still better in August." The Alten, situated in latitude 70°, and not far from the North Cape itself, has deservedly gained much celebrity amongst fishermen.

Sir Hyde Parker was, I believe, the first of our countrymen who visited this fine river for the express purpose of salmon fishing, and he was well rewarded for his pains, "having had," he wrote me, "great sport." Subsequently the Alten has been visited by several of our countrymen, amongst the rest by Mr. Edward Brettle, who met with most extraordinary success. In fifteen days, or parts of days, between the 4th of July and the 12th of August, he captured one hundred and ninety-four salmon, weighing two thousand seven hundred and fifty-two pounds, or on the average some fourteen pounds each. His greatest day was thirty-three fish, weighing together five hundred and eighteen pounds. In a memorandum of his performances in the Alten, with which Mr. Brettle favoured me, were noted down numbers of salmon of twenty pounds and upwards, five upwards of thirty pounds, and one of forty pounds!

At some sixty to eighty miles in a direct line to the east-ward of the Alten, though very considerably more if one follows the sinuosities of the coast, is another large river, called the Tana, which, by all accounts, abounds with salmon, and those of a very large size. A friend, indeed, wrote me recently, that he was going to that river this summer, chiefly because he had heard of a salmon having been captured there of such enormous dimensions, that when cut up it alone filled a barrel! But though several of our countrymen have visited this river, on which there are three or more established fisheries, during the past few years, I have not heard of their meeting with any extraordinary sport, a circumstance attributable, I believe, to freshes, etc.

The Tana, according to M. Malm, the able Conservator to the Gothenburg Museum, to whom I am indebted for much valuable information, offers a fine field for the angler. It is little likely he would meet with greater obstacles than a few sovereigns would remove; and if not elsewhere, he would be sure to find comfortable quarters at the Parsonage of Utsjoki, situated on one of its tributaries. Beyond the Tana, again, is

the Patsjoki, another fine river, that has its source in the great lake Enare, in Russian Lapland; and still farther to the eastward is a smaller river, called the Peise, both of which disgorge themselves into the Icy Sea.

These rivers—so I am told by M. Malm, who resided for some time in this part of Lapland—abound with salmon; and being, I believe, untried, are well deserving the notice of the adventurous sportsman. But as, independently of the distance, they are within the Russian territories (no great recommendation), few perhaps will think it worth while to take so long a journey.

Trout are also plentiful in almost all the Scandinavian rivers, from Scania to Lapland; but less so probably in the larger rivers than in their tributaries, or in smaller streams. A man, indeed, cannot well go wrong in the peninsula, for let him fish where he will, he is pretty sure to meet with sport. On the small river at Qvistrum, recently spoken of, for instance, two friends and myself once killed, in the course of a few hours, upwards of two hundred trout. They were small, it is true, but must have weighed together, nevertheless, between twenty and thirty pounds.

Others have had even better sport in this stream. "From about three in the afternoon until between seven and eight in the evening," writes Mr. Edward W. Foster, "I took six dozen and five trout—a few of them a pound in weight, some three-quarters, and many half-a-pound. This was quite upon a par with some of the best fly-fishing days of Loch Awe in Scotland." And he adds: "I had a long bout of it on Monday, over a good deal of the same water, and caught between seven and eight dozen of trout—some few of even better size than those of the preceding evening."

There are hundreds of other rivers throughout Scandinavia that would, no doubt, afford equal or superior sport. Near to the sources of several that fall into the Cattegat, I have heard of great things being done. But although almost every stream in Scandinavia affords trout, and beyond the 59° or 60° of latitude, grayling also, still, the farther the fisherman proceeds to the north, the more amusement he will meet with. Fish are not only more plentiful in the remote rivers, but

from being little persecuted they are less shy. But little skill, moreover, is required here, for let the fly be black, blue, or yellow, or of the colours of the rainbow, trout, as well as grayling, seem to take it with the like avidity.

"Of grayling and small trout," says Mr. Hutchinson, when speaking of the rivers flowing into the Bothnian Gulf, "there is the greatest abundance. I remember having killed seven dozen and a half in about three hours, under the falls at Lyksele in Lapland. I do not think there are any large trout in this river, at least I never killed nor saw them." . . . . . "On the road from Sundsvall to Norway, I had frequent opportunities of fishing the streams tributary to the large Swedish rivers. There are grayling and trout in all of them, and he must be a bad fisherman who cannot soon fill his basket. I and my two fellow-travellers killed one evening twenty dozen; of course they were small, but we took several of between two and three pounds."

Mr. Richard Dann speaks of trout and grayling, more especially the latter, being most abundant in the northern rivers, and tells me he has often captured seventy to eighty in the course of a few hours. I myself can bear testimony to the abundance of both trout and grayling in the northern rivers, as well from experience in the upper portion of the Clara, near to the lake Fæmund, as in Lapland.

One day, for instance, when fishing in a tributary of the river Kemi, situated in about the 69° of latitude, I took fifty brace and a half of these fish with the fly. Nearly the whole were of a good size, and their weight together must very considerably have exceeded a hundred pounds. The fish were quite a load, in fact, for my two men, who conveyed them from the boat to our bivouac, which was at some little distance. The charr, as well as the trout and the grayling, in some places also afford the northern fishermen admirable sport. The notion commonly entertained in England as to the charr not taking the fly, is altogether erroneous; for no fish rises to it with more avidity.

Mr. Charles Engström, our Consul at Gothenburg, mentioned to me, indeed, that in a small stream connecting two mountain lakes near to Hammerfest, he captured, in the course of a forenoon, from seven to eight dozen of charr of full herring-size. They seemed not at all particular, he said, as to the kind of fly, but took the one as well as the other. Mr. Engström was accompanied by three friends, all of whom were about as fortunate as himself.

When speaking of his performances on the occasion in question, Mr. Engström mentioned a somewhat singular circumstance—namely, that though numbers of charr were shortly after noon seen disporting themselves on the surface of the water, the fish all at once ceased rising to the fly; and during the remainder of the day the party did not succeed in killing even a single one. The result was precisely the same on the succeeding day, when he and his friends again fished the same stream—a heavy basket in the morning, but not a fish subsequently.

"In many of the lakes and streams in the higher range of mountains towards Norwegian Finnmark," writes Mr. Dann, "charr are very abundant. The largest I killed weighed between four and five pounds. Above the falls, near to the source of the great Tornea river, I caught enormous quantities; but it was not everywhere they would rise to the fly." "Of all fish, perhaps," Mr. Dann goes on to say, "a charr in season dressed directly it comes out of the water, is the most delicious. Those with the crimson and orange spots are the best. Many run of pale yellow with orange spots."

In conclusion: a knowledge of the waters, which experience and practice alone can give, is needful to ensure success in the northern rivers; otherwise days are lost in fishing places where no fish are to be found. Early in the season the deep pools below the falls and rapids are the best. As the summer advances, the fish get strength and take to the strongest streams; and as the autumn comes on, the heaviest fish lie just above the largest falls and rapids. It requires some nerve as well as skill to fish in these places. Two men, with a pair of sculls each, are requisite; and great care must be taken not to get drawn too near the falls, as in that case nothing can save one.

## CHAPTER IX.

The Bear in Scandinavia — Varieties — Colour — Food —
Destructive to Cattle—Lean during Summer—Tappen—
Sucking his paws — Young in womb — Gestation —
Swimming Powers—Size—Weight—Strength—Manner
of attack—Scarcity of Bears.

As a description of the chase of the bear will occupy a considerable portion of the following pages, it may be proper for me, before proceeding farther, to make a few remarks regarding this animal.

The brown bear only is common to the Scandinavian forests; the white, or ice bear (Ursus Maritimus) confines himself, as it is well known, to the polar regions; it is asserted, however, that he formerly inhabited the northern parts of the peninsula. and even now it is said that, once in a while, an iceberg floats him to the Norwegian shores. Of the brown bear, it is said by many, and Professor Nilsson, who has recently published a very interesting work on the Zoology of Scandinavia, seems also to be of that opinion, there are two kinds common to the North of Europe: the larger bear, or bear of prey (Sw. Slag-Björn, or Ursus Arctos major), which lives indiscriminately on vegetable or animal substances; and the smaller bear (Sw. Myr-Björn, or Ursus Arctos minor), which never eats flesh, and which subsists entirely upon ants or vegetable matter. Others again, on the contrary, and among the rest Mr. Falkwhom I quote with the greater pleasure, as he has undoubtedly had more practical experience upon the subject than most men -seem to think that there is only one species; and that the difference of size observable among those animals is owing to their respective ages. For myself, I cannot venture an opinion—though certainly, in the bears that I have killed, or assisted others in destroying, no difference in formation was perceptible.

Mr. Nilsson is decidedly of opinion, that, even if there be two kinds of bears in Scandinavia" (of which he is by no means certain), "they are both entirely distinct from the small black bear common to the American forests." He farther observes, that "there is no European bear, as many naturalists, with Buffon at their head, have asserted, that is black; it is true," he says, "that black bears are occasionally found, but these are always very large, and it is therefore to be presumed that the bear does not become of that colour until he has attained to his full growth; besides," he adds, and his observation is perfectly just, "they do not all seem to acquire it then, because one meets also with very large brown bears.

The general colour of Scandinavian bears is a dark brown; in some instances, however, as I have just said, they are black; and in others again of a greyish colour; these last are commonly called silver-bears. In point of fact, one seldom sees two skins altogether alike. Instances have occurred of perfectly white bears having been found in the peninsula; but Mr. Nilsson thinks that "these are accidental varieties of the species, like white squirrels, white swallows, and white crows." Bears have occasionally white rings round their necks. this very time, indeed, I have two of these animals in my possession, whose mother I shot during the last winter in the Scandinavian forests. They are male and female: the female has that peculiar mark, but the male is without it. tradicts the commonly received opinion, that the ring is confined to male bears. On this subject Mr. Nilsson observes, that "bears usually lose the ring after the second or third year; some few, however, preserve it all their lives, and these are called ring-bears."

The Scandinavian bear (even assuming it to be of the larger or destructive species) does not subsist for the most part, as many naturalists have asserted, upon flesh; for ants and vegetable substances compose his principal food: indeed, Mr. Falk justly observes, "that an animal which is able to devour a moderate-sized cow in twenty-four hours, would, if flesh formed the chief of its sustenance, destroy all the herds in the country." The cattle in the northern parts of Sweden are of a rather small breed—indeed, few of them are larger than those of the Highlands of Scotland. But the bear does not confine himself to cattle, for he devours indiscrimately horses, pigs, sheep, or goats. "The destruction which the bear commits among cattle," that gentleman farther remarks, "is often

owing to the latter attacking him in the first instance; for, when provoked by their bellowing and pursuit of him, which not unfrequently commence as soon as they get a view of of him, he then displays his superior strength." "For years, however," says the same author, "bears may reside in the neighbourhood of cattle, without doing them any injury, although," as is notoriously the fact, "they will sometimes visit herds solely from the desire of prey." Young bears seldom molest cattle; but old bears, after having tasted blood often become very destructive, and, unless their career be put an end to, commit no little havoc in the line of country they are in the habit of ranging.

"The bear," Mr. Nilsson states, though for the truth of the statement I cannot vouch, "is more or less noxious as the weather varies; for if it be clear and dry, his attacks upon cattle are less frequent than when the summer is wet and cloudy."

The bear feeds on roots, and the leaves and small branches of the aspen, mountain-ash, and other trees; he is also fond of succulent plants, such as angelica, mountain-thistle; to berries he is likewise very partial, and during the autumnal months, when they are ripe, he devours vast quantities of cranberries, blueberries, raspberries, strawberries, cloudberries, and other berries common to the Scandinavian forests. Ripe corn he also eats, and he sometimes commits no little havoc amongst it; for seating himself, as it is said, on his haunches in a field of it, he collects with his outstretched arms nearly a sheaf at a time, the ears of which he then devours.

The bear, as is well known, feeds on honey; and, according to Mr. Nilsson, he sometimes plunders the peasants of their bee-hives; of ants, also, he devours vast quantities: "probably he likes them," the Professor observes, "in consequence of their pungent taste. If any of these little creatures sting him in a tender part, he becomes angry immediately, and scatters around the whole ant-hill." The latter circumstance may be perfectly true, for all I know to the contrary; but if so, I apprehend the bear is generally in an ill-humour with the ants; because, whenever I have met with any of their nests at which the bear had been feeding, they had most commonly been turned inside out.

Bears are not often to be met with in poor hilly countries, for in these it is not easy for them to find sustenance; but the wildest recesses of the forest, where there are morasses, are his favourite haunts. During the summer the bear is always lean; but in the autumn, when the berries are ripe, and he has consequently a greater facility of obtaining food, he generally becomes very fat. Towards the end of October, he ceases for that year to feed; his bowels and stomach become quite empty, and contracted into a very small compass, whilst the extremity of them is closed by an indurated substance, which in Swedish is called tappen. This is composed, as it is said, of the last substances, such as pine-leaves, and what he obtains from the ant-hills, of which the bear has eaten.

In the beginning, or towards the middle of November, the bear retires to his den, which he has usually prepared beforehand, and of the nature of which I shall have occasion to speak more hereafter: here, if undisturbed, he passes the whole of the winter months in constant repose. But though during all this time he does not take one particle of nourishment, still he retains his condition tolerably well; Mr. Falk even asserts, and Mr. Nilsson coincides with him, that up to the end of February (after which time they imagine he becomes lean) he continues to get fatter. To this doctrine I cannot at all agree, as, in the first place, it seems contrary to reason; and in the next, I do know how the point is to be ascertained. But one thing is certain, that let the bear be killed at what period of the winter he may, he is usually pretty fat; indeed, experienced chasseurs have stated to me, that if he has been undisturbed in his lair, no perceptible difference is observable in his condition, whether he is shot in the early part of the winter, or immediately before he rises in the spring. According to one of these authorities, however, though the bear be equally fat at the latter period that substance is then of a much thinner consistency than during the depth of the winter.

As the spring approaches, the bear begins to shake off his his lethargy; and about the middle of April, though the time depends more or less upon the severity of the weather, he leaves his den. He now parts with the tappen, of which I

have just spoken; and his stomach resuming its functions, he once more roams the forest in search of food. If in the course of the winter, however, the bear be frightened out of his den and very severely hunted, he once in a while passes the tappen; in which case, it is said, he immediately grows excessively thin; this, nevertheless, I do not assert from experience; for, though at different times, I have given some of those animals rather a hard run. I never knew a circumstance of the kind to happen until towards the approach of spring, when in consequence it was almost in the course of nature. Indeed, I never heard of but one well authenticated instance of the bear having passed his tappen in the depth of winter. The inference drawn by the northern chasseurs from this is, that the tappen, in conjunction with repose, is the cause of the bear retaining his condition, though without taking any kind of nourishment, for nearly one-half of the year.

Though the tappen has probably been known to the bear-hunters of the North for ages, Mr. Falk was, I believe, the first to bring the circumstance before the notice of the public. In Sweden, however, I do not think it has created any speculation, it being perhaps considered an idle story. But if the bear really does become excessively lean in the event of his losing his tappen, which Mr. Falk and others assert to be the fact, it would seem as if there was some hidden mystery connected with it, which it is for naturalists to unravel. Should this be the case, it is not improbable but that it may eventually be discovered that a process something similar in its kind takes place in all animals that pass the winter months in a torpid state.

That the learned reader may be the better able to form a judgment of his own in this matter, I have had more than one tappen taken from bears that I myself killed in the winter season carefully analyzed, the component parts of which are stated underneath:—

Brown resin.

Green essential (volatile) oil; smells like turpentine.

Pale yellow fat oil (fixed), smells rancid.

Chlorophyle, colouring matter of leaves.

Starch.

Lignin.

Pectic acid.

Formic acid.

Sulphates, phosphates, and muriates.

Leaves of Scotch-fir (pinus sylvestris), and juniper (juniperus communis).

Stems of polytricum commune, and hypnum proliferum.

The ashes contain oxides of iron, mangan, and kali.

Be the tap or tappen what it may, however, the bear, according to Pallas, who obtained his information from the Russian hunters, has much difficulty in parting with it in the spring. "Its ejection," he says, "causes the beast so much pain, that during the process he embraces a tree, deeply scoring it the while with his fangs and claws, and absolutely shrieks with agony."

The bear, for some time after leaving his winter quarters (females with cubs lie longer than others), eats very sparingly, not more, probably, than a large dog; though at a subsequent period, as I have shown, his appetite is most inordinate. At first he confines himself to ants and other food that is easy of digestion, but when his stomach has resumed its natural tone, he then devours almost everything that comes in his way.

The story of the bear sucking his paws for the sake of nourishment, has, I believe, long since been exploded; and it is therefore unnecessary for me to give any farther contradic-But I am less surprised at its having had existence, since I have directed my attention to the habits of the tame bears now in my possession. These animals, when I last saw them, were constantly sucking, or mumbling, as the Swedes term it, their own legs and paws; the operation, which was often continued for hours together, was attended with a murmuring kind of noise, which might be heard at some distance. In consequence of this, their legs or feet were generally covered with saliva, or rather foam, which by ignorant people might not improbably be taken for the milk, which it was at one time said the bear was in the habit of extracting from his It was not the want of food that caused my bears to be so continually mumbling, for they were seen to be thus engaged, most commonly, immediately after they had been fed. Bears of every age, it is said, are subject to this peculiarity, which, I believe, has never yet attracted the attention of naturalists. The bear, I have reason to believe, obtains a new skin on the balls of his feet during the winter months. Leaving out of the question, therefore, the circumstance to which I have just alluded, if that animal is in the habit of licking his paws whilst in his den, as has been said, may not that be done for the purpose of facilitating this operation of nature?

In some book of natural history it is stated that there never was an instance known of a she-bear having been killed with cubs in her womb; various authors, also, I observe, have speculated upon the same subject. This question, foolish as it was, is now, at least to my own satisfaction, set at rest; for, during the winter before last, as I shall by and by have occasion to show, I myself shot a bear under the above circumstances. Facts of this kind, for reasons which it might not be difficult to explain, are certainly rare; as a proof, I may mention that an instance similar to the above never came immediately within Mr. Falk's own knowledge.

The female bear carries her young about six months, and brings forth when in her den at the end of January, or in the course of February. The cubs, when first born, are very small; not, however, misshapen lumps, as it used to be said, which the mother licked into form, but bears in miniature. She has from one to four at a birth, which she suckles, according to Mr. Nilsson, "until the summer is well advanced." Although the mother takes no nourishment during the time she continues in her den, she nevertheless preserves her condition tolerably well, and her teats furnish milk in abundance: for this reason, the cubs are usually found to be very fat when they are taken in the den. Should she again be with young in the same year, she does not, Mr. Falk says, suffer her former cubs to share her den the next winter, but prepares them quarters in her neighbourhood; the succeeding summer, however, she is followed by both litters, who pass the ensuing winter all together in the mother's den. Though I cannot from personal observation verify the latter statement, I have reason to believe it is true; indeed one of the most experienced chasseurs in the north of Europe, an occasional companion of mine in the forest, assured me, that he himself once found two distinct litters of cubs in the same den with the mother. "She-bears," Mr. Falk farther observes, "do not breed three years in succession; when the young are of a proper growth, which, I believe, is not until they are three years of age, she separates from them entirely."

The bear is a fast and good swimmer, and, in hot weather, bathes frequently; he climbs well, but in descending trees or precipices always comes down backwards. His sight is sharp, and senses of hearing and smelling are excellent; for these reasons, it is not often that he is to be seen. He walks with facility on his hind legs, and in that position can bear the heaviest burdens. Indeed, Mr. Nilsson relates, that "a bear has been seen walking on his hinder feet along a small tree (stock) that stretched across a river, bearing a dead horse in his fore-paws." Though his gait is awkward, the bear can, if he pleases, as I shall have occasion to show, go at a great pace. According to Mr. Falk, he grows to about his twentieth, and lives until his fiftieth year.

The Scandinavian bear, the male at least (for the female is smaller), occasionally attains to a very great size. Indeed, I myself killed one of these animals that weighed four hundred and sixty pounds; and as this was in the winter-time, when, from his stomach being contracted (which, as I have just now stated is the case with those animals at that season of the year), he was probably lighter by fifty or sixty pounds than he would have been during the autumnal months. Professor Nilsson states, that "they attain to five hundred weight." Mr. Falk, however, goes much farther; for he says, in his little pamphlet, that he once killed a bear in a skall, "so uncommonly large, that when slung on a pole, ten men could with difficulty carry him a short distance." He adds farther, "his weight could not be precisely stated;" but, according to his opinion, and he had seen numbers of large and small bears, "he weighed unflayed at least two skippunds victuallic weight, or near seven hundred and fifty pounds English." This bear, which was killed during the autumnal months, Mr. Falk described to have had so enormous a stomach "as almost to resemble a cow in calf;" but his skull, which is now in my

possession, is not at all remarkable in point of size. He did not die tamely; for, after receiving several balls, he dashed at the cordon of people who encompassed him on all sides, and, according to the same author, severely wounded no less than seven of them in succession. "One of the men he bit in thirty-seven different places, and so seriously in the head, that his brains were visible." Though the people gallantly endeavoured to stop the progress of this monster, he broke through all oposition, and for the moment made his escape: very fortunately, however, a minute or two afterwards, Mr. Falk succeeded in putting him hors de combat.

Though this bear was of so enormous a size, one of Mr. Falk's under-keepers, the most celebrated chasseur in that part of the country, of whom I shall speak much hereafter, assured me that he himself had killed one still larger, the skin of which was, by his account, of such an extraordinary size, that I am really afraid to repeat its dimensions. He added farther, that its fat alone weighed one hundred weight, and that its wrists (in formation much resembling those of a human being) were of so great a thickness, that with his united hands, which were none of the smallest, he was unable to span either of them by upwards of an inch. This bear, however, he admitted, was very considerably larger than any other that he ever killed; indeed, by his account, it must have been a Daniel Lambert among his species.

The powers of such animals must of course be tremendous; and it can, therefore, readily be imagined, that the inhabitants of Scandinavia have some little reason for the saying common among them, that the bear, together with the wit of one man, has the strength of ten. Some better idea of the prowess of a large bear may however be formed, when I state, on the authority of Mr. Falk, "that several instances have occurred in Wermeland, within the last few years, of their climbing on to the roofs of cow-houses; these they have then torn off, and, having thus gained admittance to the poor animals confined within, they slaughtered and actually carried them away by shoving, or lifting them through the aperture by which they themselves had entered." I have heard of another bear, which, after being desperately wounded, ran at the man who

fired at him, who took refuge behind a young tree; this the bear then embraced with his arms, thinking possibly it was his opponent he had got hold of: but he was then in his last agonies, and presently fell dead to the ground, tearing up the tree by the roots in his fall.

A large bear is a very formidable-looking fellow; I have heard Mr. Falk say, that he has never known an instance in which a man's hand has not been a little unsteady the first time he has come in contact with one of these ferocious animals. Mr. Nilsson states, that "the bear's attack on men, or inferior animals, is always commenced with the fore-paws, with which he either strikes like the cat, or endeavours to squeeze his enemy to death; and that, until he has laid his victim prostrate, he rarely makes use of his teeth." "Men that have been struck," that gentleman goes on to observe, "have mostly been hit with the fore-paws on the upper part of the head, with such force that the skull has been laid entirely bare."

These observations of Mr. Nilsson's, as regard the bear's attacks upon inferior animals, may, for aught I know to the contrary, be very correct; but I have my doubts as to whether they are equally applicable in the event of his coming into contact with the human race. Indeed, though I have met with many men who have either been wounded themselves, or been present when others were wounded, I never recollect hearing of an instance in which a bear either hugged a person in his embraces, or struck at him with his fore-paw in the same manner as a tiger or a cat.

In point of fact, it was universally said in Wermeland, as well as in the parts adjacent—Mr. Falk, among the rest, being of that opinion—that the bear, from some cause or other, makes a distinction; that in attacking horses or cattle, he universally attempts, in the first instance, to bring them to the ground by a blow of his paw, but when he comes in contact with a man, though he may grasp him with his paws, he only wounds him with his teeth. Indeed, from the great muscular power possessed by the bear, were he when attacking a man to strike with his paw in the same manner as animals of the feline race, destruction must, I think, generally follow

a single blow. If the bear really makes a distinction between inferior animals and mankind, it is certainly a curious circumstance, and I could never hear but one reason alleged for it; this was by a faithful follower of mine in the forest, who, on my putting the question to him, replied, that "he supposed he was forbidden by Providence." Professor Nilsson farther says, that "when the bear makes an attack upon either man or beast, he always raises himself up on his hind legs, in which position he is the strongest and most dangerous." This is certainly the case in many instances, though in others, particularly when the ground is deeply covered with snow, I apprehend he often comes on all-fours, like a dog.

Having said this much regarding the bear, it may not be out of place for me to state, that I have reason to believe, both from personal experience and from information derived from others, that these animals are exceedingly scarce throughout Scandinavia; indeed, I am inclined to think that, should such progressive inroads as have of late years been made in the forest continue, there seems a fair chance of the breed being exterminated in the course of another century or two; formerly, the bear was to be found in all parts of Sweden; but now, fortunately for the inhabitants, these animals are very rarely to be heard of in the more southern provinces of that kingdom. Mr. Greiff, to whose work I have already referred, remarks on this subject, that "bears, in many parts of the country, have disappeared with the great woods; a single one may, now and then, be found, but in Wermeland, and those districts where the larger forests abound, they still remain in tolerable numbers, and would soon advance farther inwards if not prevented."

My opinion as to the scarcity of bears in Scandinavia is, I am aware, at variance with that of several modern travellers. One gentleman, indeed, tells us (though on the authority of others) that within a very recent period prior to his passing through Norway, twenty, and even thirty of these animals had been seen together either in that country or the adjacent islands. It is not, of course, for me to contradict this statement, though it is certainly at variance both with my own experience and with the commonly received opinion of the

bear not being a gregarious animal; indeed, I am free to confess, I shall require ocular demonstration before I can believe that bears go in *droves*. A male and female bear may sometimes be together during the autumnal months, and possibly the latter followed by a litter of cubs, but that a greater number was ever seen in company never came to my knowledge.

Another of our countrymen who has, within the last two or three years, benefited the world by an account of his peregrinations in Scandinavia, says, "On passing through a thick wood, I had, for the first time, a sight of a couple of large bears of a dark brown colour that bolted from a thicket, and came down to the road, most likely in search of prey,—

'With visages formidably grim
And rugged as Saracens,
Or Turks of Mahomed's own kin;'

but on hearing the rattling of our carriage they made a hasty retreat, leaped over a stone wall at the side of the road, and quickly vanished from sight in the woods."

Independently of bears usually keeping in the wildest recesses of the forest, the place where our countryman saw this brace of Saracens curveting over a stone wall, was in one of the most southern of the Swedish provinces, and in a part of the country in which I had no idea a bear had been heard of for the last half century.

## CHAPTER X.

Bear Hunt in Dalecarlia—Grandeur of the Northern Forests
—Damage by Storms—Different kinds of Trees—The
Cunning of the Bear—Arrangement of the Skall—Laws
relating to Skalls—The Bear sighted—Disappointment—
Hope Deferred—Camping out—Fresh Start—An effective
Shot—Taking to the Water—The end of the Battue—
Three Bears and a Lynx—Return Home—Wolf started.

HAVING said this much regarding the monarch of the Scandinavian forests, I shall now attempt briefly to illustrate the

national mode of destroying bears and other wild animals wholesale by means of skalls. With this object I shall narrate my personal experience in connection with several of these interesting though not very hazardous expeditions. After which I shall give an account of my chase of the bear individually, which latter, to the sportsman is altogether of greater interest, and, at the same time, attended with no small amount of danger. The first instance of a bear skall I shall give, took place in the middle of summer, which is a delightful time of the year for an outing of the sort.

Information reached me at Stjern, that this battue was to take place in the province of Dalecarlia, over a line of country which I had traversed on a former occasion, and with which I was in consequence well acquainted. Therefore, I set off in my gig, or rather pony-cart, the only vehicle suitable for the summer season of which I was at that time possessed, for Malung; this was one of the principal places of rendezvous, and a little more than sixty miles in a north-easterly direction from my quarters. My two dogs, Hector and Paijas, as well as a peasant boy to look after them, I also took along with me. Our route lay through a hilly, deeply-wooded, and rather picturesque country, passing a very wild range of forest, between twenty and thirty miles in extent, where not a single The savage grandeur of the inhabitant was to be found. northern forests, their vastness and their solitude, can only be duly appreciated by those who, like myself, have wandered in their wilds. Mountain, rock, and glen, are all deeply covered with the melancholy-looking-pine, which may be seen waving in endless succession as far as the sight can reach. "In vain," says a contemporary writer, "does the eye, darting between their tall, straight forms, rising in stately dignity, and in their green, unchanging beauty, endeavour to penetrate the dark extent, and to catch some traces of civilization; and equally in vain does the sun attempt with his rays to pierce through their waving tops, and illumine the gloom below." Amongst this luxuriant foliage, crags of the most picturesque description often present themselves to the view; whilst the surface of the ground is strewed in every direction with large and broken fragments of rock. Many of these immense masses

have doubtlessly been detached from the neighbouring crags; but others again, are lying loose and disjointed, in such situations that they could only have found their way there owing to some extraordinary convulsion of nature. Though the wild forest-scene is at all times sufficiently monotonous, the landscape is often relieved by some of the numerous tarns and lakes, often beautifully studded with islands, that cover the face of the country; whilst streams, even if unseen, may at times be heard gurgling through some deep and lonely dell. In calm weather a solemn and death-like stillness often reigns in these desolate regions; but during storms the crash and noise among the trees is sometimes tremendous. numbers of pines, which for ages, perhaps, have set the elements at defiance, are then either uprooted or rent in twain by the force of the hurricane. In those situations where the trees are only slightly imbedded in the soil, the fall of one often causes the destruction of all around it, so that it is not unusual to see the trunks of thirty or forty lying in immediate succession to each other. Were not the numerous morasses which intersect the face of the country, and the broken nature of the ground sufficient obstacles, this cause alone would prevent the Scandinavian forests from being traversable in any other manner than on foot, the number of prostrate pines rendering it almost impossible to proceed on horseback.

The forests in the northern parts of Scandinavia are composed almost wholly of pines; but, in the southern districts of the peninsula, a variety of other trees, such as the oak and beech, are abundantly interspersed among them. There are two kinds of pine, the *Pinus Sylvestris* (from which the red deals are produced), or Scotch fir, though certainly a different variety from the tree generally sold as such by nurserymen, and the *Pinus Abies* (from which the white deals are produced), or spruce fir. This last appears to be of the same kind as the long-leaved Cornish fir. The larch and silver fir are not natives of Scandinavia. Though the pine acquires a considerable magnitude in Sweden and Norway, its size must be far inferior to those common to North America. The largest spruce fir I ever remember seeing was

in the Dalecarlian forests. It measured at about three or four feet from the ground, upwards of eleven feet in circumference. But I have met with the Scotch fir, on one or two occasions, of a still greater size.

At Malung I obtained the plan of the skall that was to take place on the following day: it was ordered, I found, by the governor of the province, in consequence of the great devastation which the bears committed among the horses and cattle in that part of the country. One of these ferocious animals, in particular (his tracks being known in consequence of his having lost a claw) killed, it was said, not less than three horses in a single night. I once saw a trap that had been set for this fellow: it was a frame of timbers placed over a horse which he had recently destroyed; on the top of this, large quantities of stones were laid, so that, in the event of its falling upon him, the weight of it might crush him to pieces. But the beast was not to be thus caught; for instead of making his entry at the mouth of the trap, as had been anticipated, he removed the stones and broke through the top of it, and thus got possession of the horse without any danger to himself.

This skall was to be conducted on a very grand scale: it was to be composed of fifteen hundred men, and to embrace, at its first setting out, a tract of country of about sixty miles in circumference. Of the above number of people, the parish of Wenjan was to furnish two hundred, Malung seven hundred, Appelbo, two hundred, and Järna four hundred.

The skall-plats, or skall-place, was situated on the western side of the lake Wan, and at about twenty miles to the eastward of Malung. This was an area in the form of a half-circle, the diameter of which might be about two or three hundred paces, marked by a pathway cut through the forest. This pathway was called the shooting line; and, for some little distance in advance of it, the underwood where it happened to be thick, was cleared away, so that the view of the shooter might not be obstructed. On this line, the people, after driving the country before them, were to converge from all points; and within this the skall of course was to terminate.

In the very considerable range of country purposed to be

hunted on this occasion, there were neither lakes, rivers, nor other obstructions of any moment; this was a favourable circumstance, as these materially tend to derange the order of a large body of people, and for this reason, if possible, ought always to be avoided. The locality therefore was good, though possibly the plan on which the skall was conducted was not so. The nights were short, which was much in our favour; and as bears and other wild beasts were known to be numerous thereabouts, we had a right to anticipate the committal of a good deal of slaughter. We laboured, however, under this disadvantage, that though the several divisions composing the skall were to have their respective leaders, who, of course, were to act in concert with each other, there was no competent person to take the command in chief. presentations of the peasants themselves, it was said, occasioned the getting up of the skall, and by them, as it appeared, it was now to be conducted.

By the laws of Sweden, when a skall takes place in any particular district of that country, every house where cattle is kept (with some few exceptions) furnishes, when required by the authorities, one man as a contingent towards the same. This is equitable enough, it being equally the interest of all parties possessed of cattle to destroy such ferocious animals as wolves and bears. Should a Sunday or other holiday intervene prior to the skall taking place, a notification is given out from the pulpit, a little before the conclusion of divine worship, specifying the number of people required, the districts whence they are to come, and the day, hour, and place of rendezvous.

It seems a singular custom that the pulpit should be the medium, as is the case in Sweden, of communicating to the public these and other ordinances, as well as much matter of a private nature, such, for instance, as when an auction will take place. But it may be very necessary in the interior of a country like Sweden; as, from the population being widely scattered over the forest, it would be very difficult, unless by the employment of messengers, to convey the requisite information to the inhabitants. A notification from the pulpit is at all times deemed a legal service, as it is held to be the

duty of every one to be presentin his respective church during the performance of divine worship.

When a skall takes place, neither boys nor women ought, strictly speaking, to form part of it; but this regulation is not very rigidly adhered to. Many boys, indeed, are often present on these occasions; and once in a while a female is to be seen. As in most instances, however, wild beasts are turned by the shouts of the people; and as the sex in Scandinavia have to the full as good use of their tongues as our fair countrywomen, I am not sure that they are not almost as useful auxiliaries in a skall as their male companions. Indeed, if it comes to real fighting, women will often keep their ground on these occasions; and I have heard of instances in which they have come into actual personal conflict with the bear, and conducted themselves in the most gallant manner.

Dogs are never allowed in skalls; were they to be at large, they would irritate and annoy the beast to that degree, that he would probably break through all obstacles. I brought my own dogs with me on this occasion, merely that they might be in readiness in the event of a wounded bear escaping through the cordon, and not with any intention of previously slipping them from their couplings.

About six of the evening of the following day, we came up with the Malung division, comprising about seven hundred men, the people, as usual on these occasions, having proceeded at a very slow pace. I was sorry to find that its movement had been conducted in so irregular a manner, that a space of perhaps a mile or more was left open in its centre. In consequence of this (to say nothing of the forest being only halfbeaten) any bears, or other wild beasts that might be on foot, had no difficulty in heading back through the gap, when of course they would be in safety. This evil, by remonstrating with the people, I endeavoured to remedy, but not being armed with authority, unfortunately without effect. Finding, therefore, that nothing was to be done, myself and people pushed forward ahead of the line; but, after we had proceeded about a mile, we came to a Sätterwall, when, feeling a little fatigued, we seated ourselves on the grass immediately in front of a little tenement, and commenced taking some refreshment.

Here we were much annoyed by the mosquitoes, which, though not a tenth part so numerous as I have seen them in Lapland, were still very troublesome. As I had taken the precaution, however, of providing myself with a small veil, which I often wore as a protection against those insects when travelling in that country, I suffered much less than my companions. The latter were not so much inconvenienced as might have been expected; for their hair, which was long and flowing, as is usual with the peasantry in the north of Sweden, greatly protected their ears and necks from the attacks of these blood-suckers.

Whilst we were thus occupied, the people were gradually, though slowly, advancing towards us, though we could not see them in consequence of the closeness of the cover. At length, when they had approached to within a very short distance of the fence which surrounds the few enclosures in the vicinity of the building where we were resting ourselves, and which might be at about one hundred and fifty paces distance, they suddenly set up a most tremendous shout. At first I was so stupid as not altogether to understand the meaning of this; but my boy, springing on to his feet, instantly cried out, "The bear! the bear!" On hearing this exclamation, I quickly, as it may be supposed, followed his example; and, whilst in the act of rising, I also caught a view of the fellow, just as he had cleared the fence, and as he was dashing along a little hollow filled with brushwood, which was within side of and ran parallel to it; my view of him, however was so transitory, that he was out of my sight before I had time to put my gun to my shoulder, and much less to fire. My boy, who happened to stand on a more commanding position than myself, subsequently saw him, after he had proceeded some two hundred paces along the hollow, emerge from it; when, heading back over the fence by which he had entered the enclosures, he once more betook himself to the forest. This, most unfortunately, was at the luckless gap of which I have just spoken, where, there being no one to oppose his progress, he of course succeeded in making good his escape.

I was now at a loss to know how to act, for I did not feel justified in slipping the dogs until I had ascertained whether

the people, by throwing back their line, would endeavour to retrieve the bear. On their coming up, however, and declining to do so, I lost no time in loosing the dogs from their couplings, when they went off on the track of the latter at such a pace, that in a very few minutes their challenges were only to be heard in the distance. Taking one of the guns that I had with me, and leaving the other, together with our knapsack, at the Sätterwall, I soon made after the dogs as fast as I was able; but the chase proved a useless one; for the bear made through the forest in so straight a line that, either from the want of inclination or ability, they were unable to come up with him. To my mortification, therefore, after something, more than half-an-hour's run, they gave up the pursuit and came to heel. The weather was very hot, and my exertions in the chase were, as may be imagined, not a little fatiguing. As all hopes of killing this bear were now at an end, we coupled up the dogs and retraced our steps to the Sätterwall. Here we again fell in with the people; who had halted, as well for the purpose of filling up the gap through which the bear had made his escape (which by this time they had succeeded in effecting), as of taking some refreshments.

The ground hereabouts was elevated, and commanded a magnificent view of the surrounding country, which was mountainous and picturesque; with the exception, however, of two or three Sätterwalls and Svedge-falls in the distance, not a vestige of cultivation was to be seen, the boundless forest stretching itself in every direction as far as the eye could reach. The smoke of many fires, curling over the gloomy pines, was now visible along a great part of our line, some of which served as signals to denote that the people were in their proper positions. By these we were enabled to distinguish that the division from Wenjan, though at many miles to the northward, was now in communication with our own; but of the Järna and Appelbo men, nothing was at this time to be seen, owing to intervening hills and the nature of the country.

At about eleven in the evening, the line again slowly advanced, when, with my people, I kept a little ahead of it, in the hopes another bear might be driven towards us. This

good fortune, however, did not attend us, though we fell in with the track of a very large one that had evidently been on foot only a few hours before.

At this season of the year, the sun sunk so little below the horizon, and the twilight was so strong that, excepting in the very thickest brakes of the forest, I think I could, without much difficulty, have killed a bird on the wing at midnight. Between twelve and one on Tuesday morning the people again halted, for we heard in the distance the order to that effect conveyed along the line from one man to the other. This halt, we then supposed, would be of but short duration, as, according to the original plan, it was intended that the skall should proceed to its final destination without making more than such stoppages as were indispensable. As the night was rather cold, however—for there came on a pretty strong wind from the northward, and as we felt chilled after the severe exercise we had taken when in chase of the bear, we now lighted a blazing fire. This served as well to warm us, as to drive away the mosquitoes, and to prepare a little of the homely provision that was in our knapsack. As was the case on similar occasions, this consisted principally of oatmeal, it being more easy of transit than most other descriptions of food. With the assistance of a small frying-pan, one of my usual accompaniments in the forest, we soon converted this into a good mess of porridge, that served as well for man as dogs.

When the peasants get up a fire in the Scandinavian forests during the summer season—for in the winter the manner of effecting this is usually different—they generally select a tree whose stem has been partially consumed on a former occasion by an accidental or other conflagration; for, under these, fires kindle and burn better than under those which are altogether green. In the event of its being intended for night quarters, care should be taken that the tree has an opposite inclination to that where one purposes lying, for it sometimes happens, either from the effect of the wind, or from its being too much consumed, that it suddenly comes down with a tremendous crash, when woe to the poor fellow who may happen to lie beneath it! In this manner I have heard of many narrow escapes, and also of more than one fatal accident.

As, contrary to our expectations, the skall continued stationary, after enjoying and doing justice to our repast, we lay down in our bivouac and reposed until the sun was high above the horizon. At five o'clock, finding that all still remained quiet, I sent one of my people to ascertain the cause of the delay, who reported on his return, after the lapse of a considerable time, that it originated in consequence of the left of the Appelbo division not having at that time formed a junction with the right of our own; he added, however, that this was likely to take place forthwith. The cordon being thus incomplete was owing, as we afterwards learnt, to the Appelbo people having in the first instance proceeded too far to the This was done that they might be the better enabled to beat that part of the forest which belonged to themselves, and over which many of their Sätterwalls were scattered. Here again, for the want of a good commander-inchief, another tremendous opening was left in the line, through which more than one bear had probably made his escape.

At this time we were not at more than about eight or nine miles from the skall-plats. Confidently anticipating that the battue would be concluded in the course of the day, I determined on pushing forward to the vicinity of it, and there to place myself in ambush, in the hopes that a bear, or other wild beast, might be driven towards me. Having come to this resolution, we were soon on foot; and as the ground was in general pretty good, and as we pushed on at a smart pace. in the course of about a couple of hours we succeeded in reaching a lofty range of hills immediately overlooking the Wan lake, near to the western shore of which the skallplats was situated. Here we lighted a fire to drive away the mosquitoes, which, now that the sun was powerful, annoyed us again not a little. After resting a while, however, I left the dogs under the care of one of the people, and, taking the other along with me, I proceeded to reconnoitre the ground, and to look out for the most eligible situation for an ambuscade. This I soon selected on a spot commanding a good view of the adjoining country; and here, for our better concealment, we surrounded ourselves with a number of pine branches, which we cut for the purpose. In this position we

patiently waited for many hours, in the hopes that something might make its appearance; but we were disappointed, for not a head of game of any sort or kind did we see; nor, indeed, until the evening was well advanced, could we hear anything of the people composing the skall, which, according to the original plan, ought to have been near to this spot by the middle of the day. Towards nightfall, however, we heard in the distance the shouts of the Malung division; and soon afterwards we were gratified by seeing the smoke ascending among the pines from the numerous watch-fires of the people from Järna and Appelbo. These latter, of whom we had not previously either seen or heard anything, were at this time at about two miles to the southward of us.

Near to midnight, by which time we had rejoined our peasant and dogs, we received a visit from two men belonging to the Wenjan, or northern division; for these, having seen the smoke from our bivouac, had been induced to make towards One of them was an old acquaintance of mine from a hamlet called Öje, situated in the wilds of the forest, at about fourteen miles to the northeast of Malung. Near to this place there is an exceedingly beautiful lake, which, though only eight or ten miles in length, is said to be studded with as many islands as there are days in the year; though this may be an exaggeration, the islands are, in reality, more numerous than one can well form an idea of. These peasants were making the round of the skall, as well to give some needful directions, as to see that its several divisions were in their proper positions. They told us that more than one bear had been seen in the course of the day, and that the great delay which had taken place originated, as we had supposed, from the extreme difficulty of keeping the people sufficiently connected; sometimes one part of the line, and then another, were too much in advance, and vice versu; and in consequence repeated halts had taken place, to rectify these disorders. They farther stated that it would probably be the middle of the following day before the battue was brought to a conclu-The poor fellows seemed much fatigued, and begged hard for a glass of brandy; but this unfortunately we had not for ourselves, much less to give away. Our provisions of every kind were at this time almost exhausted, and in consequence we were necessitated to go almost supperless to rest.

During this as well as the preceding night I had no other covering except a light shooting jacket, but I had little to complain of in regard to cold; a good fire not only sufficiently protecting us against that evil, but to a certain extent delivered us from the mosquitoes, a more intolerable annoyance. next morning, Wednesday, we were aroused from our repose at an early hour by the shouts of the people, who were now advancing upon us on all sides, and we therefore lost little time in despatching our very scanty breakfast. My toilet, however, I did not forget, for even in the wilds of the forest I always considered a good washing and a clean shirt the greatest of luxuries; indeed, if practicable, my knapsack was generally furnished with a change of linen. I now despatched my peasant with the dogs into the rear of the cordon, for I no longer dared to keep them within it; but I gave him orders to follow at some little distance, so that, in the event of a bear being wounded and making his escape by breaking through the people, I might have them in readiness. My boy I kept with me, that he might carry my second gun, as well as a light hunting-spear, for when I was thus armed I had little to fear from any antagonist I might have to encounter.

Though the arrangement of the skall, in the first instance, appeared to me exceedingly bad, yet nothing could be better conducted—such parts of it, at least, as came under my observation—than it was at this time; the people were brought up in excellent order, and not an opening was to be seen among them; indeed, they beat their ground so closely and well, that it was hardly possible they could pass over a bear or other large animal, however close he might be inclined to lie.

Though the distance from our bivouac to the skall-plats could hardly have been more than a mile and a half, yet from the necessity that existed for the people keeping in compact and regular order, and the consequent delays that took place to effect this purpose, our progress was so slow that it was many hours before we reached it. During this time I was usually at a considerable distance in advance of the line, stationing myself, as occasion offered, in the different small

glades or openings of the forest, which hereabouts was in general very thick and tangled. Though my expectations were sufficiently excited, I did not for a while, with the exception of two or three hares, see any kind of game. we had bears enclosed within the cordon was, nevertheless, nearly certain; for, independent of several reported to have been seen by others, I myself fell in with the track of a large one which had evidently been driven from the southward only an hour or two before. This was only at a short distance from where I had been in ambush during the preceding day. At last, however, and it must then have been near two o'clock in the afternoon, we reached the skall-plats, or rather shooting line; here, the people having converged from all points, a general halt took place. At this time, from the circle being concentrated in so small a space, they were two or three deep.

Hitherto during the battue I had only heard a single shot, but in a minute or less, after we had reached the skall-plats, and before we had properly taken up our several positions, a discharge or two at a distant part of the line announced that something was on foot; almost at the same instant a bear dashed at full gallop through a thick brake parallel to, and at only some twenty paces from where I stood. But at this time, owing to my attention being distracted by something that was going on, I had omitted to cock my gun, and in consequence I had no time to fire before the animal had again disappeared. My view, however, was very transitory, yet, such as it was, as I am not a slow shot, I think if I had been ready I could have put a ball through his body.

Like the greater part of those with firearms I now stationed myself a few paces in front of the cordon; farther I was not allowed to advance. This indeed was a very necessary regulation, as if I had been any distance within the skall-plats my person would not only have been much exposed to the crossfire, but there would have been great danger that the bears, or other wild beasts, finding themselves attacked at all points, and becoming desperate, would have been induced to dash at the people; in which case there is always a great probability of the animals making their escape.

For a while I remained in a part of the forest where there was little underwood, and where the trees were rather open; but, though the firing at different points was at intervals heavy, from which it was pretty evident the game we had enclosed was endeavouring to find an outlet to escape, nothing made its appearance near to where I stood. Finding this to be the case, and thinking it was probably in consequence of there being so little underwood thereabouts—for bears, as well as other wild beasts, will generally hold to the thickest cover-I now moved some paces to my left, and placed myself opposite to a very thick brake, in the centre of which was a small opening of a few feet in extent. In this new position I had not remained more than a minute or two, when the heavy firing to my left, evidently rapidly advancing towards me, together with the tremendous shouts of the people, gave me plainly to understand something was coming. In this I was not deceived, for, in a few seconds, a large and noble-looking bear, his head rather erect, and with the fire and spirit of a war-horse in his appearance, dashed at full speed into the small opening of which I have just spoken. But his stay there was momentary; for, seeing probably that the people were too thick on the ground to give him a chance of escape, he wheeled about, and in another instant he was lost in the thicket. the interim, however, I had time, though without taking any deliberate aim, to discharge both my guns, when one or both of my balls, as it was very evident from the growl he gave, took the desired effect: but he did not fall at the instant, though, after he had proceeded a few paces, and in that, while it was said no person fired at him, he sunk to rise no more.

I now commenced reloading; but I had only got a ball into one of my barrels, when another bear dashed into, and was almost as instantaneously out of my little opening, so that, by the time I had taken up my gun from the ground and placed it to my shoulder, he was all but out of sight. I fired, however, at random; but, as he was in the thicket, and went off, I I had no means of ascertaining whether my bullet took effect or the contrary. When one considers the apparently unwieldy shape of a bear, the pace that he goes at, if the snow be not very deep upon the ground, is really extraordinary. In this

instance, these animals were galloping in every direction within the skall-plats, with the quickness and agility of so many rabbits. For the best of runners to escape from a bear in the open country, is totally out of the question; and indeed, were the ground ever so favourable, a man, in the event of an attack, would have to thank his stars if he could manage to get out of his way.

It was laughable, all this while, to see the peasants, or rather those with fire-arms; for, on the slightest alarm being given, their guns were shouldered, and, with their fingers on the triggers, pointed towards the place whence the enemy might be expected to make his appearance. In general, there was an expression depicted on their countenances, which looked to me something beyond that of extreme interest: indeed, I am almost inclined to think their "over anxiety" in some instances converted hares, of which there were numbers running up and down, into bears, and that they fired at the former in consequence. Skalls, however, I should remark, were of rare occurrence in that part of Sweden, and the people were therefore less accustomed to the sight of bears than in some other districts in Scandinavia.

After a while, and when the firing had ceased along the whole line, that part of the cordon where I was stationed had orders to move forward. At first we had to force our way through an almost impenetrably thick brake, which formed, as it were, a belt within the skall-plats. Subsequently, we came to some enclosures, deeply intersected with ravines immediately overhanging the Wan lake, from which we might then be at about two hundred and fifty paces distance. We now heard tremendous shouting, and presently afterwards we saw a bear, at some forty or fifty paces from the land, swimming for the opposite side of the lake. Its escape, however, was next to impossible, as, to guard against a circumstance of this kind happening, several boats had been previously stationed on the water; these went in immediate pursuit, when a shot or two through the head presently put the beast hors de combat; and subsequently we observed its carcase towed to the land.

The ground where we now stood was considerably elevated,

and commanded a fine prospect of the boundless forest which surrounded us on every side, as well as of the beautiful lake Wan, which lay immediately beneath us. Added to this, the chase by the boats, and the death of the bear in the water, together with the formidable appearance of the fifteen or sixteen hundred armed men who composed the battue, and who, drawn up in the form of a crescent, and attired in as many various costumes as the number of parishes they belonged to, were now fully in view-formed a picture that was both highly interesting and animating. In the enclosures were still some small brakes, and these, it may be supposed, we took care to beat very closely, as nothing was more likely than that a wounded bear might have crept into them for shelter. we did not meet with any of those animals; though, from a close thicket, a lynx, a fine long-legged fellow, nearly as red, and twice as large as a fox, went off at an awkward gallop. This animal, or at least one of the same species, I had previously seen when we were firing at the bears; but at that time I did not care to waste my powder and shot when so much better game was on foot. When he first started, he was within about fifteen paces of me, and then I could probably have killed him; but at that time some of the people were in the line of my fire, and I was therefore obliged to let him go off unmolested. When, however, he was at some sixty or seventy paces distance, I sent the contents of both my barrels after him, though, as far as I could judge, without any effect; but his escape was next to impossible, for the people at this time were eight or ten deep; so, after running the gauntlet of twenty shots at the least, he was at length slaughtered.

Thirty or forty hares were still within the cordon, perfectly bewildered with the noise and uproar that was going forward. When, therefore, we had beaten the few remaining brakes, and ascertained, beyond a doubt, that neither bear nor other wild beast was remaining, a war of extermination was carried on against them. Some of these poor animals were knocked on the head as they were running among the legs of the people; whilst others, and by far the greater part, were shot; this indeed was altogether contrary to orders, for, in skalls, no one is permitted to fire, except at bears or other wild beasts.

Such shooting I never before witnessed; for, in more than one instance, I saw twelve or fourteen shots fired in succession at the same hare, when within only a few paces of the muzzles of the guns, without its being touched; and, after all, I almost suspect more of them died from fright, than in consequence of any actual injury they received.

By the time all the hares were killed, we had advanced close upon the edge of the water, when, nothing else presenting itself, the skall of course terminated, and the people dispersed. The game was now to be collected from the different parts of the skall-plats: this was effected by slinging it on poles, and carrying it on men's shoulders. It was found to consist of a lynx and three bears. It was, however, reported that several bears had been killed during the battue, and secreted by the peasants and others for their own individual benefit. How far this story might be true I know not; though I certainly believed it the less, as I myself was numbered among the delinquents.

One of the bears, the same that I had at least some hand in killing, was rather a large male; the other two were females. I did not very particularly examine any of them; but, from what I saw, I had reason to suppose that they had only received very few balls; this I should have been surprised at, had I not known what wretched performers the peasants usually are on these occasions, for I have no doubt but that between one and two hundred shots were fired at the bears alone during this particular battue. Their guns, and more particularly the locks, are commonly of a very sorry description; and in the course of the day, near to where I stood, I certainly heard as many clicks, or miss-fires, as explosions. At fixed objects, many of the Swedish peasants are capital marksmen; but in general they have little idea of hitting anything in rapid motion.

Here was but a sorry return for the loss of time occasioned to fifteen or sixteen hundred men who composed this skall, many of whom, in consequence of residing at long distances, were absent from their homes for five or six days. The expense altogether I heard estimated at about five thousand rix-dollars, or two hundred and fifty pounds of our money,

which is no inconsiderable sum in Sweden. But had the skall been as well conducted in the commencement as it seemed to me to be towards the conclusion, I have little doubt from what I know of that part of the country, that instead of three bears, ten or fifteen of these animals, together with many other wild beasts, might, with every facility, have been slaughtered. In this case the trouble and expense would have been well repaid. The bears in this instance died tamely, for I did not hear of their making any attack upon any part of the line; this, as I have shown, is not always the case in skalls; for those animals will occasionally dash at the people, when, if not quickly destroyed, they sometimes do much mischief. Neither elks nor wolves were seen, that I am aware of, on this occasion; the former, however, are sometimes to be met with in that part of Dalecarlia, and the latter are rather numerous.

Some time after the battue was terminated, the game, with the exception of the hares, which the peasants were allowed to keep themselves, was sold by public auction. The sale seemed to create a good deal of interest, though but little competition in regard to bidding; for, altogether, it produced the merest trifle. This was the less to be wondered at, as there were few besides peasants present on this occasion: indeed, with the exception of the Länsmän of the several parishes, and two or three others, I hardly noticed a person at all in the rank of a gentleman. When the sale was concluded, the people dispersed, and every one made for his respective home.

As I have before said, the skall-plats, in the most direct line a man could take across the forest, must have been near twenty miles distant from Malung; but, as our knapsack was altogether emptied of provisions, I determined on at once facing for that place. After I had taken a long swim, therefore, in the Wan, the weather at the time being warm, we set forward on our journey. On our way through the forest, we witnessed the mischief likely to be occasioned by the bivouac of so many people during the two preceding nights: the heather was blazing in many directions, so that, unless checked by rain, there seemed a fair chance of the fires spreading both far and wide.

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As the dogs could no longer do any harm, we now loosed them from their couplings, in the hopes that they might get something on foot; but not a single head of game were we fortunate enough to fall in with during the whole distance to Malung. Indeed, since our departure from that place three days before, though we had crossed so much country, we only saw (with the exception of what was killed within the skallplats) a capercali hen, with her chicks, the latter of which apparently were only a few days old. Having struck too far to the southward, we got a little bewildered in the forest, and in consequence our walk was extended to a greater length than we had anticipated. At night-fall, however, we reached a Sätterwall, within five or six miles of Malung. Here we were fortunate enough to procure a fine bowl of milk, which tended not a little to recruit our rather exhausted strength. Both my boy and the peasant were at this time pretty well tired, and either unable or unwilling to proceed farther; so, leaving them at the Sätterwall, I made the best of my way alone to Malung, where I arrived soon after midnight. As I felt somewhat fatigued from my walk, together with not having enjoyed much rest during the two preceding nights, I was not sorry to get into a comfortable bed. breakfast on the succeeding morning, which was fine and warm, I started from Malung on my return to Stjern; but prior to setting off, my boy rejoined me from the Sätterwall, where I had left him on the preceding evening.

The road, as I have said, between Malung and Ytter Malung, nearly followed the course of the Dal river. About midway between the two places there were some tolerably fine rapids, on coming to which, I was tempted to leave my gig for a few minutes, as well for the purpose of taking a bath, as to endeavour to kill a fish for my dinner. Whether it was owing to my want of skill, however, or to the coldness of the water, I know not; but I could not succeed in persuading any of the finny tribe to rise to my fly; and having no bait along with me, I was in consequence unable to catch anything. In this river the fishing is said to be very good, both trout and grayling of a large size being abundant. Salmon, also, I understood, were occasionally to be met with.

On our way through the forest, one of my dogs, who was running behind, suddenly challenged to the track of an animal that had preceded us on the road. On looking ahead, the mystery was explained, for at about two hundred paces distance, I espied a large wolf, in colour as grey as a badger, making through the trees in a slovenly gallop. I now became rather uneasy for my dog who pushed after him at his best pace. To alarm the wolf, therefore, I discharged my gun which was lying ready loaded in my carriage; this, probably, caused the beast to move off in double-quick time, and the dog in consequence, finding he could not come up with him, soon afterwards gave up the chase and came to heel. But firing was perhaps a useless precaution, as wolves in the summer season seldom attack even dogs.

## CHAPTER XI.

Sixty Bears to one man of about forty—Another Bear Skall—
The Bears Ringed — A Long Wait — Squatting like
Rabbits — The First Shot — Interesting Scene — Another
Bear — Two more Bears — End of the Battue — A Wrestle
with a Bear — A Bear Charging — Another Skall — The
Coup de Grace — The Author in a Dangerous Predicament — Close Quarters — A Soldier Scalped by a Bear —
A Bear and four Cubs — The Woman and the Bear —
The Bear perfectly riddled — Very tenacious of Life —
Bears discovered by a Capercali — Conclusion regarding
Skalls.

Some few days prior to the skall of which I am about to speak, I was in the northern parts of the province of Dalecarlia, when an express reached me from Mr. Falk, with intelligence that a she-bear and three very large cubs had been roused from their winter-quarters, near to a hamlet called Skoga, situated at about seven or eight miles from Stjern. He added farther, that they were safely *ringed*, there being at that time much

snow upon the ground, and that he intended forthwith having a skall for the purpose of destroying them. On receiving this information I lost no time in retracing my steps to the southward; upon which Mr. Falk, who had handsomely deferred making his final arrangements until my arrival, fixed upon an early day for the skall. A Sunday happening to intervene, the usual notification was given in the several churches, and the requisite number of men were ordered out.

At an early hour on the appointed morning, the weather being clear and cold, Mr. Falk, together with several other gentlemen and myself, proceeded to the place of rendezvous, which was at some little distance to the westward of a lake called the Boda. Here we found upwards of five hundred men assembled, whom Mr. Falk immediately formed into two divisions, and organized in the manner of which mention has just been made, and as they were universally armed either with axes, pikes, or guns, they presented, as was usual on these occasions, a rather warlike appearance. When all the necessary arrangements were completed, the people were marched off in single file to the ring, which was on the summit of a rather lofty range of hills, at about three or four miles to the westward.

Mr. Falk now took the command in person of the dref or driving division; the other, the hallet, or stationary division, he entrusted to one of the under forest-keepers (Krono Skogvaktare), who was his right-hand man on this as on many similar occasions. In this particular instance, indeed, that person rendered us the most essential and valuable services. The man's real name was Jan Andersson, but in consequence of the confusion arising from the peasants having no surnames, Mr. Falk had given him the appellation of Jan Finne, and by this he was known in all the country round about. He was a quiet, good looking man of about forty years of age. His ancestors were natives of Finland; for, together with numbers of others, they had migrated from that country about a century and a half ago, and settled in the northern parts of the Wermeland forests and places adjacent.

Among these Fins are many of the most successful and daring bear-hunters in the kingdom, but the exploits of few

of them that I ever heard of, came up to those of Jan Finne; for, though still in the prime life, this man had killed, according to his own account, sixty-five of those animals with his own gun, independently of several others in whose death he had been accessary in skalls or otherwise. He had never been wounded in a single instance, which was rather remarkable for an old bear-hunter; though, by his own statement, he had experienced several narrow escapes; but his good fortune in thus avoiding accidents was, probably, owing to his management and judgment, as well as to his superior skill in the use of the *skidor*, or snow-skates, of which I shall have occasion to speak much hereafter. His father, however, who in his day had also been a celebrated chasseur, had not been so fortunate, for a bear on one occasion wounded him rather severely.

A short time subsequent to the period of which I am now speaking, Mr. Falk represented to the Government Jan Finne's general good conduct as forest-keeper, as well as the services he had rendered the country in having destroyed so many In consequence of this representation, the Gowild beasts. vernment awarded him a handsome silver medal, and with this Jan Finne's person was decorated one Sunday in the church at Răda. In presenting him with the medal, Mr. Falk stated, in presence of the whole congregation, why such distinction had been conferred. Mr. Falk afterwards gave a sumptuous dinner, in honour of the occasion, to Jan Finne, who, though a peasant, had, as we have seen, merited the compliment, at which, among other guests, I had the pleasure to be present.

The skall I am about to describe was of a greater magnitude than is usual in the winter time, in consequence of the known wildness of the bears we were then about to attack; those animals having already been on foot, and changed their quarters three several times since they had been first disturbed about ten days before. For this reason it was highly inexpedient that the cordon should approach too near to them in the first instance. The extent of the ring was previously known to Mr. Falk, from one of his people having reckoned the exact number of steps it took him to go round it. Being

once possessed of this information, and knowing how many men he had at command, it only became necessary for that gentleman to calculate the distance the people should stand apart from each other, at the first setting out of the skall, and to give his orders accordingly.

On our way to the ring, we met with one of Mr. Falk's people, who reported the bears to be still safe within it. was the more gratifying intelligence, as, from those animals having so frequently changed their quarters within a recent period we were not a little apprehensive they might have again moved themselves off. On our reaching the vicinity of the ring, a general halt took place. Here the people were obliged to deposit their knapsacks; and their persons also underwent a rigorous search, in order to deprive them of any brandy they might happen to have about them. This was a very necessary regulation, as, in the event of a few men being intoxicated, the whole order of a skall is easily destroyed. Drunkenness, on these occasions, is therefore severely punished by legal enactments. In this instance, the Länsman of the district, Mr. Palin, accompanied us; and as the peasants naturally stood much in awe of this personage, of whose functions I have already spoken, they conducted themselves in the most exemplary manner.

After a little reorganisation had taken place among the people, we again moved forward (though now in the most perfect silence) towards the ring. There was a light air at this time from the eastward, and Mr. Falk, in consequence, judiciously ordered Jan Finne, whose division was to form the western side of the skall, which of course would be under the wind, to lead in the first instance. This precaution, as it will presently be seen, was attended by the most fortunate results. On our reaching the ring, therefore, Jan Finne, with his division, to which I attached myself, branched off to the left; whilst Mr. Falk, with the remainder of the people, took the opposite direction.

In this manner we proceeded to form the cordon, the track that we were to pursue having been marked out by those who had ringed the bears: for this purpose, the rear of our line dropped a man, as had been previously determined upon at about every nine paces. The people forming Mr. Falk's division, for the reasons that gentleman has given, were, however, stationed something farther apart from each other.

The division to which I had attached myself was, as I have stated, to form the hallet, or stationary part of the skall. After proceeding, therefore, for some distance, and on coming to a part of the forest where the trees were rather open, and where there was little underwood, I placed myself in the most favourable position I could select, some few paces in advance of the cordon. Here I had not waited more than ten minutes. the people all the while keeping the most guarded silence, when, to my left, a great shout was set up of "The bears! the bears!" In looking in that direction, I very distinctly saw one of those animals at about a hundred paces distance: but he was so shrouded in the thicket, and my view of him was so transitory, that I did not think it worth while to fire. One of the peasants, however, discharged his piece at the bears, the four being together, though I believe without effect. This shot, together with the shouts of the people, was the means of turning them, for they instantly headed about and faced towards the opposite, or eastern side of the ring. It was fortunate they took this direction, as, had they made to the northward, from the cordon being at that time incomplete, they would in all probability have escaped. I was much afraid this would have been the case; and so, as I afterwards learnt, were Mr. Falk and Jan Finne, both of whom, on hearing the shot, and apprehending what might happen, hurried forward their respective divisions as fast as possible, and luckily they were in time to form a junction before the bears made their appearance in that direction. Everything now remained perfectly tranquil for a long while; for, even when the cordon was completed, it became necessary to strengthen those parts that were the weakest, as well as to make certain other arrangements. To effect these objects, Mr. Falk, Jan Finne and the other officers, were kept very actively employed for a considerable time.

At about one o'clock, three shots—the one from the centre, and the others from the wings of the opposite division (the usual signals on these occasions)—together with the cries of the people, which now might be indistinctly heard in the distance, announced that it was advancing towards us. Two hours or more, however, must have elapsed, during which, from the quicksilver being little above zero, and from my only being provided with my common shooting-jacket, I was almost perished with cold, before we heard another discharge, or saw anything of the bears; for, now that these animals found themselves environed on every side, they kept the closest and most tangled brakes; and the people, as is usual, on these occasions, proceeded at a very slow pace.

Beginning to tire at last with remaining so long idle in the same position, I advanced alone about fifty paces farther within the cordon, when I stationed myself in such a situation. that I could command a tolerable view of the surrounding forest; but this, for the reasons already given when speaking of the skall in Dalecarlia, was altogether contrary to rule. Here I had not remained a very long while, when a shot to my left gave me to understand that the bears were not far off; and the next minute, at about one hundred and fifty paces from where I stood, I caught a glimpse of them as they were crossing a small opening among the trees. The old bear was in advance, and the cubs, which were of a very large size, were following in succession upon her track. I might now by possibility have done execution; but thinking, from the direction they were taking, that they would come nearer to me, I refrained from firing. In this, however, I acted wrong, for instead of facing towards me, as I had anticipated, they made for the opposite side of the ring; presently afterwards, indeed, the shouts of the people, together with several shots, plainly indicated that they had made their appearance in that direction.

Some little while subsequent to this, I was joined by Lieut. Oldenburg, of the Swedish army, who resided in the vicinity of my quarters at Stjern, and from whom, on various occasions, I have received much civility and attention. This gentleman and myself were conversing together in an under-tone of voice—my double gun, which was on the full-cock, being at the time loose in my hand—when two of the young bears, either of them nearly as large as animals of that species we are

accustomed to see in England, suddenly made their appearance on the outskirts of a thick brake, at about twenty paces from where we stood; but, on seeing us, they squatted like rabbits, or at least this was the case with one of them, for of the other I got the merest glimpse possible. We both now fired, the Lieutenant a little after myself, and the foremost of the bears as instantly fell; but the other, at the same moment. disappearing in the brake, I had no time to discharge my second barrel. As that which was down, however, showed some disposition to get on his legs again, I ran close up to him and sent a bullet through his skull. Besides the latter ball, the bear only received one other, which, on his body being opened at a subsequent period, was recognised to be mine. Indeed, when Lieutenant Oldenburg fired, the animal was in the act of falling, and of this he was himself fully aware. first ball shattered the bear's right shoulder (the point exposed to me) to pieces, and after passing through his body and ribs, it lodged on the skin on the opposite side—in fact, it was within an ace of going through him altogether; but the ball was quite flattened, and as large as a halfpenny.

For a while all remained pretty quiet; but presently afterwards, the tremendous shouts of the people opposite to us, probably at little more than two hundred paces distance, together with the very heavy firing that was kept up, plainly told us the remaining bears were endeavouring to make their escape in that direction. The scene had now become very animating and interesting, for at one period we counted no less than ten shots in the space of about a minute. After a time, however, the firing ceased altogether, and Lieutenant Oldenburg and myself were then almost led to conclude that the whole of the bears were slaughtered. But in this supposition we were mistaken; for presently we viewed the old bear which, from the manner of dragging herself along, was evidently much wounded, as she was slowly making her way across a small glade in the forest. Though Jan Finne, who by this time had joined us, called out to me, it was useless, I sent a ball after her; but as she quickly disappeared in a thick brake, we had no great reason to suppose it took the desired effect.

In the space of two or three minutes, during which several shots were fired immediately opposite to us, we again saw the old bear; but owing to an intervening brake, my view of her was much more indistinct than that obtained by my companions, who were a pace or two to the left of me. At this time she was standing motionless, with her front towards us, and at about ninety paces distance. Jan Finne and Lieut. Oldenburg now lost no time in discharging the rifles with which both of them were provided. Jan Finne fired first; and, though without a rest of any kind, with so good an aim, that his ball, as we subsequently found, entered her breast, near to the shoulder, and ran the whole length of her body, when it lodged in her haunches: she did not, however, alter her position, and only noticed the wound she had received by a little shake of her head. Lieut. Oldenburg was more fortunate, for dropping on one knee, and though, like Jan Finne, without a rest, he took so good a direction, that his ball entered the heart of the animal, when she instantly fell dead upon the spot.

The firing in front of us was, at intervals, still kept up for a minute or two longer, and then ceased altogether. this, Jan Finne, after we had advanced up to the bear which Lieut. Oldenburg and himself had just shot, hallooed to Though at this time we were hardly the people to halt. fifty paces from them, not an individual could we distinguish, in consequence of the closeness of the cover. now informed Mr. Falk, who was along with his divison, and immediately opposite to us, that three of the bears were dead within the ring; for, independently of the two that we ourselves had killed, we observed a third lying prostrate on the snow at some little distance. In reply, that gentleman told us a fourth was killed near to where he stood; so that the whole of those of which we had come in pursuit and we had not the good fortune to meet with others in the same ring-were now all slaughtered. The skall, as may be supposed, was then quickly brought to a conclusion, for, with the exception of a few hares, which the people knocked on the head with sticks, there was neither wolf nor other animal remaining with the ring.

Thus ended this battue, which was said to have been among the most successful Mr. Falk ever commanded, for four bears, all of which might be termed large, are not to be killed in the Scandinavian forests every day in the year. The result, however, would probably have been different had it not been for Mr. Falk's precaution in ordering Jan Finne to lead with his division under the wind in the first instance; as, had the contrary been the case, the bears would most likely, for the time at least, have made their escape. Indeed, from the variableness of the weather subsequently, and the consequent state of the snow, I am not quite sure but that if those animals had escaped on this occasion, they might not have got off altogether.

Casualties at skalls are not of unfrequent occurrence; indeed, I have already said, that at one which Mr. Falk commanded. the same bear wounded no less than seven of the people. "Upon another occasion, and this was likewise at a skall," that gentleman states, "a badly wounded bear rushed upright on his hind legs on a peasant who had missed fire, and seized him by the shoulders with his fore-paws. The peasant, on his side, laid hold of the bear's ears and shaggy hair thereabouts. The bear and the hunter (a man of uncommon strength) were twice down, and got up again without loosening their holds, during which time the bear had bitten through all the sinews of both arms from the wrists upwards, and was at last approaching the exhausted peasant's throat, when the author in lucky time arrived, and by one shot ended the conflict." The man here alluded to by Mr. Falk I saw during the last spring; he was, as that gentleman observes, possessed of great strength, and his arms, which he bared for my inspection, were deeply marked with the scars which he received during the above extraordinary conflict.

Though I never witnessed an accident at a skall, I was myself on one of these occasions in considerable personal jeopardy from a bear. The circumstances, which, as they may not be uninteresting, I shall detail at length, are as follow:—Information was brought to Mr. Falk that this animal had been accidentally roused from his winter quarters at no great distance from the iron forge of Wägsjöfors, in Fryksdal, and

that he was then safely ringed in the vicinity of that place; a requisition from several of the inhabitants of the surrounding district was at the same time conveyed to that gentleman, requesting him, in his capacity of Jägmästare for the province, to order a skall for the destruction of the beast. As, for reasons best known to himself, Mr. Falk did not consider it desirable to lose any time, he proceeded on the succeeding day to Wägsjöfors, which was at some forty miles to the northwest of Risäter, in order to make the needful preparations for the battue, which he determined should take place forthwith.

At an early hour on the following morning several hundreds of people were assembled, and a line of circumvallation was soon formed around the bear. For a time, however, little was seen of him, as he held to the most tangled brakes within the ring; but when the circle became contracted, he was then necessitated to show himself, and as he dashed from the one point to the other, in the hopes of finding an outlet by which to make his escape, not a few shots were directed towards Several of these took effect, but as they did not tell in any vital part they only tended to make him more desperate. At last, therefore, and when the people were standing close alongside of each other, he dashed at the line, upsetting in his way one man and wounding another, and succeeded for the time in making good his retreat. On either side of the men who were knocked over by the ferocious beast there were two individuals armed with guns, but though all four fired when he was within a few paces of the muzzles of their pieces, it was with no effect. One of the fellows, indeed, it was said, was in such a state of trepidation at the so near approach of the rugged monster, that he sent his bullet whistling high up into a tree; and another of them, from the like cause, fired into the ground.

I was not a spectator of this chasse, being absent at the time in Dalecarlia; indeed, it was got up in so great a hurry that it was over before I heard anything about it; but three days afterwards, when I returned to my quarters, intelligence reached me of what had taken place, and also that Mr. Falk purposed having another skall on a grand scale the suc-

ceeding morning, again to attempt the destruction of the same bear.

I had now, it is true, little time to make the needful preparations for the journey; but as Mr. Falk, in a letter to a friend, described this beast to be among the very largest of his species that had ever been seen in the Wermeland forests, I thought it a pity to miss the chance of being in at his death; towards evening, therefore, I got into my sledge and set off to Wägsjöfors, where Mr. Falk was then remaining. I reached that place about ten o'clock at night.

On the succeeding morning, after breakfast, our party, which was pretty large, set off in our sledges for the place of rendezvous, which was at six or seven miles distance. Here we found between six and seven hundred men assembled, whom Mr. Falk, with his under-keepers and other assistants, arranged in the usual manner. On this occasion there was a considerable number of soldiers present, many of whom had been expressly ordered from a distance, subsequent to the last skall, for the purpose of assisting in the one which was about to take place. These ensured the better organization of the people; for the military, as I have already remarked, from their habits of discipline, commonly make the most efficient skall-fodgar, or under-officers.

As we had so considerable a number of people, and the ring was not of any great size, Mr. Falk was enabled at the first setting out of the skall, to place them at only a few paces apart from each other. This was very desirable, as, from the bear having succeeded in breaking through the cordon when the previous battue took place, we could not but anticipate he would make a similar attempt on the present occasion. We were well prepared, however, to receive him, as in this instance unusual attention had been paid in the examination of the fire-arms with which the people were provided; and these, besides, were only placed in the hands of persons who were supposed to be capable of using them with effect. The guns were also equally distributed throughout the line, so that let the bear make his appearance at what point he might, he was pretty certain to meet with a warm reception.

On this, as on similar occasions, Mr. Falk led the driving

division, whilst his right-hand man, Jan Finne, took the command of the stationary wing of the skall; I attached myself to the latter, and placed myself in a favourable position a little in advance of the people. In this instance, I was only armed with my rifle, having had no time before leaving home to send for my double gun, which, with my dogs, I had left at a distant point in the forest. This, as I shall presently show, was a rather unfortunate circumstance.

All being now in readiness, the driving division, as we knew by hearing their cries, moved forward; but they had not continued their march for very many minutes, before a volley of shots in the distance announced that the bear was on foot. For a long while subsequent to this, however, all remained perfectly quiet, and not another discharge was audible; nor did we, at the point I was stationed, see or obtain intelligence of the beast. Tired, therefore, of waiting, and being joined by Jan Finne, who, like myself, was without information, we proceeded together to the spot whence the firing had taken place, to ascertain how matters stood. Here we found that the animal had met with so hot a reception on his approaching the line, very many shots being fired at him almost at the same moment of time, that being intimidated from breaking through the people, he had headed about, and retreated back into the ring; but he had not escaped with impunity, as was evinced from his track being very deeply marked with blood.

Jan Finne and myself now lost no time in hastening to Mr. Falk, who was in the centre of the driving division, to inform him of the wounded state of the bear. On hearing which, that gentleman shortly afterwards ordered a general halt, when he permitted me to take Jan Finne, and to advance into the ring, for the purpose of giving the beast the coup de grace. Mr. Falk's object in this was to do away with the necessity of the opposite lines of the skalls coming too nearly in collision with each other, for had such been the case, it was not impossible but that, owing to the cross-fire, accidents might have happened among the people. Mr. Falk would have accompanied us in person, but he was apprehensive that if the multitude was left without a commander, confusion and disorder might have taken place. As there was some risk,

however, that whilst Jan Finne and myself were pursuing the tracks of the bear within the ring, we might be taken for the beast himself, and thus have had a few bullets sent after us, Mr. Falk issued orders, which were quickly conveyed from the one man to the other around the whole cordon, that we were going within the circle, and that, in consequence, no one should fire under any pretence whatever. Jan Finne and myself now hastened back to the point where the bear had received his wounds, and from thence we pursued his tracks within the ring. For a while we were followed by three or four individuals, but on our pointing out to them that we were much more likely to attain our object if left to ourselves, as in that case our movements would be conducted with the greater silence, they all rejoined the ranks, and we were left entirely alone.

Though it was evident from the manner in which the beast had dragged himself along, and from the quantity of blood he had lost, that he was desperately wounded, it was ten minutes or a quarter of an hour before we saw anything of him. At last, however, we got a glimpse of him as he was making his way among the trees at some little distance in advance of us. I now lost no time in firing; but owing either to the trees intercepting my ball, or to an incorrect aim, he went off unhurt. Jan Finne did not discharge his piece, which was probably attributable to his not getting a sufficiently distinct view of the animal to have enabled him to have done so with any prospect of success.

When I had reloaded, we again continued the pursuit, and shortly afterwards we once more viewed the bear, who kept halting occasionally as he was retreating from us, at about thirty-five paces distance. On seeing him we both fired, and the beast as instantly fell; but it was only for a few seconds that he lay prostrate, for rearing himself up, and uttering a terrible groan, he dashed at no contemptible pace towards us. Jan Finne now made the best use of his legs, and ran for it, and I should perhaps have acted wisely had I followed his example; but thinking that with a little management I might avoid the onset, I simply stepped a pace or two on one side, and sheltered myself behind the stump of a pine which had

been felled (probably when the snow was deep), at about four feet from the ground. In this while, however, I kept my eye steadily fixed upon the enraged brute, and I was thus enabled so to direct my movements in unison with his that he was incapable of seeing me. By adopting this manœuvre, I anticipated that he would have passed my place of concealment, and I should thus have readily escaped. But the beast was not to be so foiled, for when he had advanced to within about three paces of the stump, he halted, and, growling desperately, he cast his eyes about him in every direction, as if at a loss to understand in what manner I had eluded his clutches. Jan Finne, who by this time had sheltered himself behind a tree at some thirty or forty paces distance, now cried loudly to me to run; but thinking there was as much danger in adopting that course, the snow being knee-deep, as in standing-still, I determined on remaining in my position. I kept my eye. nevertheless, constantly fixed upon that of the bear, so that I was in readiness to bolt the instant I should observe him making serious demonstrations of attacking me. Had the stump which befriended me been more elevated than it was, I might possibly, with good management, have been enabled to reload my piece without attracting the attention of the beast; but it was so low, that it was only by holding my body in a stooping position that I could keep myself concealed from his sight. Had I at this time been possessed of a pocket-pistol, I could, with every facility, have shot the brute through the head; but unfortunately I was not provided with any other weapon except the rifle which I had just discharged.

If I had been alone on this occasion, I might have been in some little jeopardy; but as I could fully depend upon my companion, and as I was morally certain that the instant he had reloaded his gun I should quickly be relieved from the rather awkward situation in which I had perhaps foolishly placed myself, I cannot say that I felt much apprehension for my personal safety. But Jan Finne was rather slow in his movements, so that I think near three minutes must have elapsed before his piece was again charged. In all this while the bear still remained in much the same spot where he had first stationed himself; and instigated by fury, or the pain of his

wounds, or probably by both causes combined, he with distended jaws kept growling, or rather roaring, in the most furious manner.

Though, in consequence of directing my movements by those of the bear, the animal did not at first discover my place of concealment, yet he at last either viewed me as I was peeping from behind my friendly covert, or he got so strong a scent of me as to be assured that I was there; for fixing his eyes directly upon the stump, which he had not previously done, he with a terrific growl was in the very act of coming at me. But in this he was baffled, for at the moment he was making his spring, and as I drew backwards to avoid the coming storm, Jan Finne fired with so deadly an aim, that, his ball entering the head of the beast, he instantly sank lifeless upon the snow.

We now gave the death halloo, on which the skall quickly dispersed, and the people flocked in upon us on all sides to view the game. Our prize was a male bear, but he was far from being the monster that he had been described; he was, however, of a considerable size, for, wasted as he must have been, owing to the wounds he had received a few days previously, he weighed, as we afterwards ascertained, nineteen lispunds twelve marks, victuallic weight, or three hundred and sixty-six English pounds.

Among a variety of other anecdotes relating to accidents that have occurred at bear-skalls, I select the following: it was told me by a Captain Eurenius, with whom I became acquainted two or three years previously at Carlstad. The skall at which Captain Eurenius himself was present, took place about the year 1790, in the parish of Yestram, in the province of Wenersborg. It was conducted in the usual manner, every person having his proper position assigned to him; but one man, an old soldier, who was attached to the hallet, or stationary division of the skall, thought proper to place himself in advance of the rest, in a narrow defile, through which, from his knowledge of the country, he thought it probable the bear would pass. He was right in his conjecture; for the animal soon afterwards made his appearance, and faced directly towards him. On this he levelled and attempted to dis-

charge his piece; but owing to the morning being wet, the priming had got damp, and the gun missed fire. The bear was now close upon him, though it is probable that, if he had stepped to the one side, he might still have escaped; but, instead of adopting this prudent course, he attempted to drive the muzzle of his gun, to which neither bayonet, or other weapon was attached, down the throat of the enraged brute. This attack the bear parried with the skill of a fencing-master; when, after wresting the gun out of the hands of the man, he quickly laid him prostrate.

All might still have ended well; for the bear, after smelling at his antagonist, who was lying motionless and holding his breath as if he had been dead, left him almost unhurt. animal then went to the gun, which was only at two or three feet distance, and began to overhaul it with his paws. poor soldier, however, who had brought his musket to the skall contrary to the orders of his officers, and knowing that if it was injured he should be severely punished, on seeing the apparent jeopardy in which it was placed, quietly stretched out his hand and laid hold of one end of it, the bear having it fast by the other. On observing this movement, and that the man in consequence was alive, the bear again attacked him; when, seizing him with his teeth by the back of the head, as he was lying with his face to the ground, he tore off the whole of his scalp, from the nape of the neck upwards, so that it merely hung to the forehead by a strip of skin. The poor fellow, who knew that his safety depended upon his remaining motionless, kept as quiet as he was able; and the bear, without doing him much farther injury, laid himself along his body.

Whilst this was going forward, many of the people, and Captain Eurenius among the rest, suspecting what had happened, hastened towards the spot, and advanced within twelve or fifteen paces of the scene of action: here they found the bear still lying upon the body of the unfortunate man; sometimes the animal was occupying himself in licking the blood from his bare skull, and at others in eyeing the people—all, however, were afraid to fire, thinking either that they might hit the man, or that, even if they killed the bear,

he might in his last agonies still further mutilate the poor sufferer. In this position, Captain Eurenius asserted that the soldier and the bear remained for a considerable time, until at last the latter quitted his victim and slowly began to retreat, when, a tremendous fire being opened upon him, he instantly fell dead. On hearing the shots, the poor soldier jumped up, his scalp hanging over his face so as completely to blind him; when, throwing it back with his hands, he ran towards his comrades like a madman, frantically exclaiming, "The bear! the bear!" But the mischief was done, and was irreparable. The only assistance he could receive was rendered to him by a surgeon, who happened to be present, and who severed the little skin which connected the scalp with the forehead, and then dressed the wound in the best manner he was able. scalp, when separated from the head, Captain Eurenius described as exactly resembling a peruke. In one sense, the catastrophe was fortunate for the poor soldier. At this time every one in the army was obliged to wear his hair of a certain form, and he in consequence, being now without any, immediately got his discharge.

On the authority of Captain Eurenius, I shall give another anecdote relating to skalls. I am the rather induced to insert it as it is honourable to female courage. The circumstance occurred in the autumn of 1815, near to Upperud, a large forge situated in Dalsland, in the province of Wenersborg, at which place the Captain was then residing.

One morning, at an early hour, a boy was on a fishing excursion on the Wenern lake, which was near to Upperud, when he observed a large bear playing with four cubs on a low point of land. Two of the cubs he described to be very much smaller than the others, from which it was inferred there was a year's difference in their ages. The boy seeing this returned as quickly as possible to Upperud, and apprised the proprietor of that place of what he had seen. This gentleman immediately ordered out all the people that could be spared from the manufactory, and as others in the vicinity volunteered, between seventy and eighty men were soon got together. There being boats enough for the purpose, by nine or ten o'clock in the morning of the same day the party was

wafted to the island where the boy had seen the bear. This was deeply wooded, and about two miles in length, by half or three-quarters of a mile in breadth. Here the people were formed into two divisions. One of these, and to which the principal part of those armed with guns was attached, was posted in ambush at the extremity of the island, whilst the other, after being conveyed in boats to its opposite end, had instructions to endeavour to drive the bear towards their Meanwhile several boats were kept constantly rowing about the island, to prevent the bears from taking to the water and swimming across to the mainland. As soon as the old bear heard the people advancing upon her, she drove her cubs, as is usually the case when they are in danger, up into the trees, or into holes and other places of concealment, for safety. This was known from the cries of the cubs; for on these occasions the mother generally resorts to considerable violence to accomplish her purpose. She then continued her retreat. When, however, she came near to the ambuscade, she was saluted with several shots, more than one of which was supposed to have taken effect, though without doing her any serious injury. Finding escape by that point was impossible, she headed about, and, breaking through the people, succeeded for the time in making her escape.

Those with guns were now put into boats, and instantly conveyed to the opposite end of the island, where they placed themselves in concealment in the same manner as before. But the driving division had nothing to do but to wheel about, and to retrace their steps. These manœuvres were repeated three or four times, the bear as often breaking through the ranks of her assailants. Towards evening, however, and after the poor creature had been desperately wounded in many places, she took refuge in a close and tangled brake. The people now formed a cordon immediately about her; but, from their proximity to each other, no one dared to fire, for the fear of hitting his comrade. attacked her, nevertheless, with axes and various other weapons. The bear, thus beset, kept wheeling about from side to side to defend herself against her numerous foes, several of whom she laid prostrate; and would otherwise have injured them, had not her jaw been previously fractured with a ball.

Among the party was the wife of a soldier, a very powerful woman of about forty years of age, who greatly distinguished herself on this occasion. Wishing to have a share in the honours of the day, she armed herself with a stout cudgel, with which she hesitated not to give the poor bear a tremendous blow upon the head. But the animal did not think this treatment quite fair, and not exactly understanding the deference due to the sex, sent her heels into the place where her head ought to have been, to the no small amusement of the bystanders. Nothing daunted by what had happened, the woman caught up another stick, the former having been broken owing to the force of the blow, and again began to belabour the bear; this the beast resented, as at first, by again tumbling her over. Still our Amazon was not satisfied; for, laying hold of a third cudgel, the second, like the first, having snapt in two, she renewed her attacks upon Bruin, and, in return, had to perform a third somerset in the air. The bear, being at last fairly exhausted from wounds and loss of blood, fell dead amid the shouts of her enemies.

The skall had now lasted for six or seven hours, but during its continuance nothing had been seen of the cubs. As the evening, however, was then well advanced, and as the people were much fatigued after the exertion they had gone through, the search for them was deferred until the next day. During the night, therefore, boats were ordered to row round the island, to prevent their escape to the mainland.

On the following morning, a large party proceeded to look for the cubs; but, though they searched high and low, not a vestige of them was to be found. This was supposed to be owing to their having taken advantage of the darkness of the night and swum to the opposite shore. But I should be inclined to think they had secreted themselves in crevices of rocks, or other hiding-places, in the island.

It seems quite incredible that half the number of wounds could have been inflicted upon any animal, as Captain Eurenius states was the case with the bear of which I have just spoken, before life was extinct. Those beasts are, how-

ever, very tenacious of life, and I have heard of instances where, though they have been perfectly riddled with balls, they have recovered from their wounds. This is the less to be wondered at in Scandinavia, as the balls generally made use of in that peninsula are of a very small size; even if it be a heavy ball, and the bear large, its effects, if it come in contact with a bone, are not always so certain. This was particularly exemplified in the following instance, also related to me by Captain Eurenius.

At a skall in Dalsland, the district which was the scene of what I have just been narrating, a man fired at a bear that was crossing him at about ten paces distant. The ball, which was an ounce in weight, took effect in the shoulder, but the animal passed on as if nothing had happened. An instant afterwards, the bear received a bullet from another person, and sank to rise no more: the last ball passed right through the animal, and lodged in a tree on the opposite side.

This bear was subsequently skinned and dissected, at which operation Captain Eurenius assisted. It was then found that the ball, which had come in contact with the shoulder of the animal, had made no kind of impression against the bone. It had flattened out into the form of a star, its diameter, when in that state, according to a sketch drawn by Captain Eurenius, being nearer four than three inches, and the edges of it not thicker, to use his own words, than an English banknote. Assuming this to be a fact, which I am inclined to do, it seems singular that the shoulder-blade bone of even an old bear, as this was represented to be, should be able to resist the effects of an ounce ball.

During a certain period of Captain Eurenius's residence in Dalsland, that district, which borders the western shores of the Wenern, was over-run with bears, and in consequence a number of skalls took place. The period I allude to was during the last war between Sweden and Norway, and when the opposing armies were stationed on the chain of mountains separating the two kingdoms. In all this line of country, bears are probably as numerous as in any part of Scandinavia; but, owing to the continual firing and noise kept up by the hostile parties, those animals deserted their fastnesses, and

fell down, in considerable numbers, to districts where they had previously been comparatively scarce. Two or three years afterwards, however, and when peace had been restored between the belligerents, the bears became nearly as scarce as ever in Dalsland, the greater part of them having again retreated, as it was supposed, to their native wilds. This story I had from Captain Eurenius, and I gave the greater credit to it from having received accounts something similar from other quarters.

Captain Eurenius mentioned, moreover, that an idea was entertained in Dalsland, that wolves and bears were seldom to be found in abundance in the same district; but he did not pretend to say that they usually preyed upon each other. To prove his position, he stated that, prior to the war to which I have just alluded, wolves were uncommonly abundant in Dalsland; but that when the bears descended from the distant mountains, and overran the country, then the wolves almost disappeared. When, however, the bears retreated to their former haunts, the wolves returned in even greater numbers than before, and ever since had continued to be the pest and annoyance of the inhabitants.

All bear-skalls are not quite so well managed as Mr. Falk's. Indeed, I remember being present, a little more than a year ago, at one where the result was rather ludicrous. The people were formed, as usual, into two divisions, the driving and the stationary. To the latter of these I was attached, when, snugly posting myself in a brake, I patiently waited for several hours the coming of the bear. But here I might have remained till now, without a chance of seeing one of those animals, for it turned out that the driving division of the skall had mistaken their way, and marched off to a different part of the country, and thus allowing more than one bear, which were said to have been on foot, to make their escape.

During the winter, or rather spring, when, from the state of the snow, it was next to useless attempting to kill a bear in any other manner, I myself took the command of two small skalls in the Wermeland forests. In the one instance, I had one hundred and seventy men, whom Mr. Falk placed under my orders. On this occasion the weather was excessively bad, it pouring with rain the whole of the day: the snow besides, in most places, was about three feet deep, so that the labour of getting along was excessive. Partly owing to these unfortunate circumstances, the people misconducted themselves, and, leaving a gap in their line, allowed a capital bear that we had encircled, to make his escape. In the other instance I had only between 60 and 70 men; but, though our numbers were so small, we fortunately succeeded in slaughtering a brace of bears that we had surrounded.

Young bears during skalls, often climb into trees, and thus escape their pursuers. A circumstance of this kind was nearly happening a few years ago in one of Mr. Falk's battues. A capercali, however, by its flight, discovered the animal high up in a pine, when it was immediately shot. Nets are sometimes introduced at bear-skalls. Mr. Falk never makes use of them, as he considers that, if he can get together a sufficient number of men, the purpose is as well answered.

When I was in Russia some years ago, a gentleman of rank attached to the British Embassy, informed me that himself and several others had established a club for the purpose of bear-shooting; and that, when they attacked those animals, they were invariably provided with nets. These must undoubtedly be useful in preventing the escape of wild beasts: and, besides, when entrenched behind them, they secure one's personal safety.

Spears, as I have more than once said, are made use of in the Wermeland and Dalecarlian bear-skalls; but these are in general of a very wretched description, and little capable of opposing any serious resistance, in the event of an attack, to those formidable animals. A rifle may answer very well in a skall, there can be no doubt; but, as the bear usually holds to the thickest brakes, and as, in consequence, one can seldom see him at any considerable distance, I am not sure whether a double gun would not be equally efficacious. If a person has an attendant, however, both would doubtless be useful accompaniments.

Before taking my leave of bear-skalls, for hereafter I shall have little occasion to make mention of them, I may remark, that though they are occasionally highly interesting, this is

not unfrequently far from being the case, for it often happens that, even if the bear be within the cordon, he is killed, or makes his escape, at a distant point to where an individual may be stationed; and, in consequence, he sees little or nothing of the sport. The danger of being present at bear-skalls, experience proves, is not very considerable; for out of the number of people generally engaged in them, comparatively few accidents take place. In point of interest, however, they cannot be compared to the description of chasse in which I was engaged during the succeeding winter, which I shall by and by have occasion to describe; but then, it must be admitted, that such is infinitely more hazardous.

## CHAPTER XII.

Bear Hunting in Summer unsuccessful—A Bear carrying off a Heifer—A Bear Chase—Bears attacked by individual Women and Men with bludgeons only—A Fight between a Bull and a Bear—Incidents connected with She-Bears with Cubs—Very Ferocious—Bears attacked by Wolves— Successful Bear Hunting in Summer entirely dependent on the possession of good Dogs.

In the course of the summer I made two or three excursions into the forest in search of bears, but these at that period proved altogether unsuccessful; for, either owing to the scarcity of those animals, or to my ill fortune, I never fell in with any of them. In one instance, however, I possibly might have done so had it not been for an accidental occurrence. This was under the following circumstances:—On a Sunday afternoon, whilst two or three children were herding cattle on a Svedge-fall in the forest, in the vicinity of Gräs, a hamlet situated at sixteen or eighteen miles to the southward of my quarters, a large bear suddenly dashed in among them. The brute first despatched a sheep which happened to come in his way, and then a well-grown heifer;

this last, in spite of the cries of the children, he then carried over a strong fence of four or five feet in height, which surrounded the Svedge-fall, when, together with his prey, he was soon lost sight of in the thicket. The children now collected together the remainder of their charge, and made the best of their way to Gräs, where they resided, and related what had occurred.

Their story, as it may be supposed, created no little sensation in the hamlet, and a number of peasants in consequence lost no time in proceeding to the spot where the accident had happened. By this time the bear had drawn the heifer some distance into the forest, though they had no difficulty in discovering the direction he had taken from the moss being torn up, and from the ground in places being marked with blood. The bear was angry at being thus disturbed, which he evinced by his growls on hearing the shouts of the people: on the approach of the latter, however, who, though very near to, were unable to distinguish him, from the brake being thick and tangled, he quitted his prey and retreated farther into the forest.

By this time, as it may be imagined, he had made a good hole in the heifer, for bears have a most inordinate appetite. But to prevent his again feasting at their expense, the peasants now felled many of the surrounding pines, some of which were of a considerable size, and placed them over the carcase. They then despatched a messenger to Mr. Falk, as the hunting-master of the province, to inform him of what had happened; but that gentleman being unwell at the time, it was not considered desirable to get up a skall for the destruction of this marauder.

Under these circumstances, as nothing better was to be done, I took my dogs, Hector and Paijas, along with me and proceeded to Gräs. Here I procured a peasant to act as my conductor to the spot where the remains of the heifer were lying. A little before reaching these, however, I left my guide, together with the dogs, and proceeded alone with great silence and caution, in the hopes that if the bear was still about the carcase I might be enabled to steal upon him. But this was not the case, and indeed I now found that, in spite

of the pile of trees the peasants had placed over the heifer, the bear, by dint of his enormous strength, had managed to draw his prey from under them, the whole of which, with the exception of a bone or two that were strewed about, he seemed to have demolished. Supposing now that he might be at a distance—for it frequently happens that, after devouring an animal, the bear takes himself off to another part of the country—I ordered my dogs to be slipped from their couplings. Unluckily, however, at the moment they were loosed they began fighting, which, with the noise we made in separating them, caused no small uproar in the forest. This was singularly unfortunate; for the bear, as it subsequently turned out, must at that very time have been lying immediately near to us; but on hearing the noise he doubtless moved himself off. Added to this, our first cast, when in search of him, was a wrong one; so that, when the dogs did hit upon his track, which was not until some time afterwards. he was too far ahead to give such as mine a chance of coming up with him. When they got scent of the bear, nevertheless, they went off merrily, and we continued the chase for a considerable time; this at least was the case with myself, for I soon outstripped my companion, of whom I saw no more for the rest of the day. But all was useless, for, after running on a cold scent for several hours, during which I had reason to suppose they never came up with the beast, the dogs gave up the pursuit, and came to heel. Had they on this occasion been once well in with the bear, which in all probability would have been the case had it not been for the untoward circumstance I have mentioned, I might possibly (the weather being very warm at the time, which was much in my favour) have given a good account of him.

With no other guide than a small pocket-compass which I usually carried with me in the forest, I now made the best of my way towards a hamlet where I had left my carriage in the morning, which I succeeded in reaching when the evening was well advanced.

Though mere children are often employed to tend cattle in the Northern forests, and though circumstances very similar to what I have just related are of every-day occurrence, I never recollect hearing of their being attacked by bears, unless those animals had been molested in the first instance; but in that event the beasts occasionally make dreadful retaliation. An instance of this kind occurred in Wermeland a few years prior to my visiting it. A bear attacked some cattle, of which a poor woman had the charge, when, catching up a thick stick, she, with extraordinary resolution, assaulted him in her turn. But she soon had cause to repent of her temerity, for the ferocious animal threw her down and wounded her very desperately, altogether in twenty-five places. Indeed, at last, she only saved her life by remaining motionless, for the bear thinking her dead, left her.

Captain Eurenius related to me an instance of the same kind: a peasant in Dalsland, a district, as I have said, bordering on the western shores of the Wenern, was one day standing at his own door, in the year 1815 or 1816, when he heard one of his cows making most plaintive outcries. Laying hold of a bludgeon, the nearest weapon he could put his hands upon, he quickly ran to her assistance. On reaching the spot, which was at not more than seventy or eighty paces from his house, he found the poor animal on the ground, with a large bear lying over her, and in the act of tearing her to pieces. Not liking to lose his cow, the man, with more courage than prudence, began to belabour the beast with his bludgeon. This the brute for a time took in good part, and refused to quit his hold of his victim; but at last, from feeling the smart of the blows, he left the cow, and dashed at the man, who now took to his heels, and bawling most lustily for assistance, made the best of his way for the house. Before he got halfway there, however, the bear was up with, and soon laid him At this critical juncture, his cries having been heard, assistance arrived, and the bear retreated, having no otherwise punished him for his temerity than with a few slight bruises; but had not succour been at hand at the moment, it is not impossible that his life might have paid the forfeit of his rashness.

A third instance of a similar nature was related by Dr. Mellerborg. The circumstance happened almost under his own eye, near to a place called Hede, in the province of

Herjeadal: "A poor woman was tending her cattle in the forest, when, as in the above instances, they were attacked by a bear. On this she seized a billet of wood, and running up to the animal, succeeded in so far intimidating him, as to cause him to leave his prey. Not contented with this success, however, she pursued and struck the bear, on which the enraged beast turned upon, and presently destroyed her." Indeed, according to Dr. M., with the exception of one of her hands, he afterwards devoured the whole of her person. The latter part of the story seems to partake a little of the marvellous; but Dr. M. assures me he arrived at the spot in less than half an hour after the catastrophe had happened.

Now that I am speaking of the bears' attacks upon cattle, I am reminded of an anecdote related to me by Jan Finne. The circumstance, he stated, occurred some years before, at only about twenty miles from Stjern: A bull was attacked in the forest by a rather small bear, when, striking his horns into his assailant, he pinned him against a tree. In this situation they were both found dead—the bull from starvation, the bear from wounds.

There was another bear in the range of the forest to the eastward of the Klar, and between that river and the Knon, which during this particular season committed much havoc among both horses and cattle. This, though fruitlessly, I spent several days in search of; but of this animal, as it was supposed, I shall have occasion to speak hereafter. During two of the days that I was looking for this beast, I was accompanied by a peasant named Abraham, who resided at a small hamlet called Sälje, situated six or seven miles to the northward of my quarters. This man, about eleven or twelve years before, was present at a skall commanded by Mr. Falk, when a very large bear that was enclosed within the cordon attempted to break through where he himself was stationed. At this point, unluckily, few others besides striplings were placed, the whole of whom, on the approach of the bear, made the best use of their legs, and got out of his way. Abraham now attempted to discharge his gun, but it unfortunately missed fire. Nothing daunted, however (by his own account), at this mishap, he still kept his ground, and endeavoured to

retard the farther progress of the brute, by opposing to him the muzzle of his gun. But the chances were too much against the man; and, as may readily be imagined, the bear quickly threw him on to his back, when, after biting him rather severely in both his legs (the scars of which I saw), the animal succeeded in making his escape.

In the course of conversation Abraham mentioned to me. that his father was one day walking in the forest, when he accidentally came close in upon a large she-bear, with several of her cubs, lying basking on the ground. old bear immediately dashed at him; when, being armed only with his axe, he was obliged to retreat to the top of a large stone that happened to be in the vicinity. Here, brandishing his axe in one hand, and his knife in the other, he stood prepared to make the best defence he was able against his formidable opponent. But the bear did not altogether like his appearance; for, though she kept making continual demonstrations by raising herself on her hind legs, she did not care to come into contact with him. In this very unpleasant situation, Abraham assured me his father was kept a prisoner for near half a day. At last the bear moved off to some little distance. which gave him an opportunity of leaping down from the stone, when, running in an opposite direction to that which she had taken, he fortunately succeeded in making his escape, without her further molesting him.

Though the above anecdote may seem rather marvellous, I feel little inclined to doubt its truth from having heard of several other instances of a similar kind during my abode in the North of Europe.

A she-bear with cubs is a formidable animal to meet in the forest. In most instances, however, on the approach of danger, she drives her offspring into the trees for safety. This, as I have before observed, she is said to effect with so much violence, that their cries may often be heard a considerable way off; she then gradually retreats to some little distance. "This is a sure token," Mr. Falk says, "that she means to defend her cubs; it is then very dangerous to shoot the young ones thus situated, before you first free yourself from the mother, who, in such case, will generally attack you with fury."

In exemplification of this gentleman's statement, I may mention the following anecdote. It was related to me at Oje, a small hamlet, situated in the wilds of Dalecarlia. of the story, who had then been dead for a few years, was a resident of that place. This man, being one day in the forest, fell in with a young bear, which had taken refuge in a tree under the above circumstances. This he shot at, and brought to the ground; but his triumph was of short duration, for the cries of the cub presently brought the mother, all furious with rage, to its assistance. Having now nothing wherewith to defend himself against the attacks of his antagonist, he was quickly overpowered, and desperately bitten in many parts of his body. Indeed, it was said he would have lost his life, had it not been from the bear having wounded herself with his knife, which, as is usual with the peasantry of the North, was attached to his girdle. After a while, however, she left him; when, taking the cub, which by this time was dead, into her mouth, she carried it off with her.

Another anecdote of a similar nature was related to me at Sundsvall, a small town situated on the shores of the Gulf of Bothnia. But this rencontre terminated rather more agreeably.

A peasant was one day walking unarmed in the forest when he met with a cub, which, as in the above instance, took shelter up a tree. Keeping watch himself, he now sent his daughter, who happened to be with him, home for his gun, when he presently brought it to the ground. But the adventure did not end here; for the cries of the cub soon brought the mother to the spot, when she in her turn was quickly destroyed by a bullet that the peasant sent down her throat.

Unless a bear has been molested in the first instance, or that it be a she-bear with cubs, that animal will commonly run at the sight of a man; under other circumstances, I have seldom heard of their attacking a person. Jan Finne, however, told me of an instance that had occurred some years before, when a young girl, having accidentally gone near to the den of a bear, was attacked by the beast, and though her cries presently brought people to her assistance, by the time they arrived,

the ferocious brute had so torn and mangled her, that she died shortly afterwards.

Though, if unmolested, the bear usually flies from man; should the contrary be the case, and he be wounded, he sometimes takes a terrible vengeance, for neither numbers nor obstacles, however formidable, will prevent him from attacking his opponents.

Another of my guides, Daniel Jansson, who was a capital shot with his rifle, had been in at the death of twelve or fourteen bears, several of which he had shot with his own gun. One circumstance that he mentioned is perhaps worth recording.

During the winter season, some twelve or fifteen years before, he, together with several other peasants, went in pursuit of a bear. On this occasion they borrowed a very good dog from Mr. Geijer of Uddeholm. During the chase, and when Jansson and his companions were far behind both the dog and the bear, a drove of five wolves, as they knew by their tracks in the snow, attacked and devoured the dog. The appetites of the wolves, however, not being sufficiently satiated with this meal, they made after the bear. On coming up with that animal, which was of rather a small size, a severe conflict, as was very apparent from the state of the snow and the quantity of hair both from the bear and the wolves that was lying about, took place. But the bear came off victorious; for he succeeded in driving away his antagonists, and, owing to the evening being advanced, for the time to make his escape. A few days subsequently, nevertheless, Jansson and his companions killed this bear; but his skin, which they presented to Mr. Geijer in lieu of his dog, was of little value, in consequence of the wolves having made too free with the fur.

Though the bear on this occasion escaped from the fangs of the wolves, he not very unfrequently falls a sacrifice to those animals when the attack is made by a considerable drove. Several anecdotes to this effect have been related to me. Jan Finne was one of my authorities: he mentioned two instances, that came within his own knowledge, of bears having been killed by wolves. In the one instance there were seven wolves, and in the other eleven, engaged in the combat.

Mr. Christian Beckman of Carlstad, to whom I am indebted for many civilities, was another of my informants. He stated that on a certain occasion a drove of wolves attacked a bear, when the latter, posting himself with his back against a fallen tree, in that position for a while defended himself against his opponents; but at last the wolves, finding means to get under the tree, wounded him desperately in the flank. Some peasants now came up to the spot, when the wolves retreated; but the bear, being then in a disabled state, fell an easy prey to the people.

In the above instances, and others that I have heard of, I have reason to believe the bears were of a small size; and none of them were attacked by the wolves in their dens. Indeed, from the powers of the bear, if his hind-quarters were only protected, I have little doubt he could defend himself from twenty such assailants.

As I have said my expedition after bears in the course of this summer proved altogether unsuccessful: this was the less to be wondered at, as, in that part of Wermeland, it was an unusual circumstance for those animals to be killed excepting in traps at that period of the year. As a proof of this Mr. Falk never shot a bear, excepting in skalls, in the summer; the like was the case with the most celebrated of the Dalecarlian chasseurs; and even Jan Finne had only killed a single one. The reason alleged for this was twofold; the scarcity of bears, and the consequent difficulty of meeting with them in the boundless forests which covered the face of the country; and also from there being but few dogs that would stand to, or drive them properly when once on foot. Mr. Falk and others, however, spoke of a Fin, who, when alive, resided at a hamlet called Granberg, situated between forty and fifty miles to the northward of my quarters, that had shot many bears in the summer: this was owing to his being possessed of a most capital dog; for, if the latter once succeeded in getting a bear on foot, he would worry him for a whole day together; and in consequence, if the man could only manage to keep within hearing he was almost certain, sooner or later, of coming up with the animal.

Though, in the country of which I am now speaking, it was

an unusual circumstance for bears to be killed in the summer through the assistance of dogs, yet at some distance farther to the northward, where the forests were more open, and the facility of seeing those animals at a distance was consequently greater, they were not unfrequently so slaughtered at that period of the year. The dogs, however, were not allowed to go at large; but they were hunted in leashes, in a manner that I shall describe hereafter.

From personal experience I can say little regarding the chasse of the bear in the summer, as, from circumstances, I had no opportunity of attempting it, excepting during this particular season: then, indeed, from my dogs being indifferent, I did not think it worth while to go out more than four or five times. On very many occasions, in following up this amusement, a person would certainly experience blank days; and even in the event of his finding a bear, both the dog and game might take in so straight a line across the country that, from the impossibility of traversing the forests, excepting on foot, he might lose them altogether; still, I have no doubt, if this system was persevered in, as was exemplified in the case of the Fin to whom I have just alluded, it would eventually · prove successful. Very warm weather is said by every one to be the best for the purpose, for at that time the bear is commonly soon distressed, and often comes to a stand in the first thick brake he meets with. If a man then keeps under the wind he may probably manage to steal within a few paces of the animal. Towards the autumn, I apprehend, would be the most favourable time for the purpose; for then the bear is often excessively fat, and his locomotive powers in consequence cannot be great.

In exemplification of its being more difficult for the bear to escape from his pursuers when in a state of great obesity I may mention that, on a certain occasion during the winter time, I gave one of those animals so severe a run on my snow-skates that, on opening his body thirty-six hours after his death, it was found that nearly the whole of the fat of his intestines was in a state of liquefaction, and floating about his body like so much oil; in fact, we were obliged to take it out

with a small cup. A similar instance to this once came within the knowledge of Mr. Falk, who was of opinion that, even had the beast received no mortal wound, he would have died from the liquid state of his fat.

## CHAPTER XIII.

Hunting in Autumn and Winter—Winter Dress—Seasonable Colours—Frozen Feet—The First Snow Fall—Bear Hunting—Black Cock and Capercali—Bears Ringed— The most celebrated Dalecarlian Chasseur—Chased by a Bear—Close Quarters—Another Bear Adventure— Curious Shooting Superstitions.

I SHALL now give an account of some of my sporting experiences during the autumn and winter months, which period, for the individual chase of the bear, is much the better time of the year. By October the peasants were generally attired in their winter garments. This, for the females, consisted of short jackets, made of sheepskins, with the woolly side inwards; and for the men, of coats of the same material. Over this, which which was called pels, the latter often wore, when at church, or on other occasions, their ordinary coats. The greater part of the men were provided with gloves, to which no fingers were attached, reaching half-way up their arms. These, which were frequently made of white wool and handsomely embroidered, were of so great a size as much to resemble gauntlets. They were capital preservatives against the cold. My own dress, when in the forest at this period of the year, with the exception of the "pels," which I never made use of, was very similar to that of the peasants. It consisted of a straight coat without a collar, which reached to my knees, and buttoned well about my neck, trousers, warm stockings, and gaiters. It was composed of coarse cloth, the manufacture of the country, the cost of which was the merest bagatelle. In this dress, however, which was well lined

throughout, I was able, when using exercise, to set the weather, let it be ever so severe, almost at defiance.

My favourite colours were green and grey. The former is perhaps the best for the summer season, when a person is on sporting excursions, as it more nearly resembles the foliage of the trees; the latter for the winter, when, all nature being clothed in frost and snow, a man, if standing still, may in the distance readily be taken for the trunk of a pine. Some attention should be paid to this point, for the eye of a bird or beast is quickly caught by any object, the colour of which materially differs from the surrounding scenery.

I seldom wore linen shirts in the winter-time, but substituted, in their stead, such as were made of fine flannel: these are the greatest preservatives of health in a cold climate, when using violent exercise. I rarely made use of a hat at that season; for, unlike the peasants, my hair was cut quite short, and in consequence, had I had no other covering for my head, my ears would soon have been frost-bitten. I therefore always substituted a cap in lieu of that article of dress: the peasants, nevertheless, generally wore their hats the whole of the winter.

When I was in the forest, I was commonly habited in a cap of the same colour and materials as my clothes. To this three lappets were attached; two of a small size, one on either side, to fall over my ears, which guarded them from the effects of the cold; and the third, about six inches square, was fastened behind, and in a degree prevented the *snow*, which at times came from the trees almost in avalanches, from penetrating down my neck. These lappets were removable at pleasure, by turning them under the lining of the cap, and in consequence I only made use of them in snowy and severe weather.

I usually wore very similar shoes to the peasants; the cost of a pair was less than two-and-sixpence. The soles of these were very thick, and were composed, with the exception of the outer part, which was of leather, of many layers of the bark of the birch-tree. Shoes made on this construction were supposed to afford much greater warmth than those on the common principle. The grand secret, however, of keeping

the feet warm in cold countries is to have one's shoes sufficiently roomy and large, which prevents the circulation of the blood from being impeded.

I was obliged to pay a good deal of attention to my feet, as, owing to neglect during the first season I passed in Scandinavia, they were frost-bitten. This happened one day that I was in the forest, in the early part of the winter, the weather at the time being excessively severe. I was crossing some morasses, which were insufficiently frozen, when, from not picking my steps, I was soon half-leg deep in water. To this I paid little attention, having all my life been accustomed to similar exposure. Subsequently I felt a greater degree of cold in my feet than I had ever before experienced; but it was not until several hours afterwards, and then more from curiosity than any idea of danger, that I was led to examine into the state of them. It was well that I did so, for I now discovered that one of my feet was severely frozen, and the other slightly so. I could not, however, get off my shoes without the assistance of a knife, and even then, from being firmly attached to the stockings, a large portion of the latter was carried along with them. Such parts of my feet as were affected were quite white, as hard as stone, and without any sensation whatever; so much so, that, on striking them sharply with a stick, not the slightest feeling was excited; but, on the application of snow, with which my attendant rubbed them, the blood fortunately resumed its circulation. Subsequently a little inflammation came on, and though not sufficient to confine me to the house, I was unable to take exercise with any very great degree of comfort for some time afterwards; the skin on the parts that had been affected turned black and came away, but this was not until after the lapse of a week or two. Throughout the winter, and up to this very day, my feet have remained tender and susceptible of cold. Indeed, every one tells me that, as long as I live, I shall feel them to tingle in severe weather.

I have been thus particular because there may be others like myself who have been accustomed to expose themselves to wet and cold, without thinking of the consequences. In our climate this may do very well, but in the more northern

regions too much caution cannot be taken. In my case there was no great harm done it is true, but, perhaps, if I had neglected to examine my feet for a few hours longer, which was nearly being the case, I might have been laid up all the winter, and even worse consequences might have ensued.

When on a journey I was provided with a large boat-cloak, which I had caused to be lined throughout with sheepskins. Thus equipped I could almost laugh at the weather, let it be ever so severe. Indeed, though I have travelled much in Scandinavia during the winter season, from having suitable clothing, I never experienced one-tenth part of the cold and misery as when making long journeys on tops of mails and coaches in England.

On the last day of October a little snow fell, and the next morning the ground was covered with it to about the depth of an inch. Its coming thus early was a fortunate circumstance; for, as I afterwards learnt, it enabled the peasants to ring more than one bear. These animals, as I have said, retire to their winter quarters about the beginning of November. If, therefore, there be snow upon the ground this is the proper time to range the forest in search of their tracks. For a while afterwards the weather remained clear and cold, during which I made one or two short excursions with my gun in the vicinity of my quarters; but I only killed two or three black-cock and capercali. Wild-fowl, woodcocks, snipes, &c., had now all taken their departure, and either gone farther to the southward or proceeded to more genial climates. The black and white (or royston) crow and larks had also disappeared.

Towards the middle of November I obtained intelligence of several bears, which, it was reported, were safely ringed: one at some distance to the eastward of Sälje, a hamlet situated at about seven miles to the northward of Lapp cottage, where I now resided; the others, consisting of a shebear, with cubs, near to Tönnet, a village at some seven miles farther to the northward. The first, or Sälje bear, had been roused from his winter quarters by two men, who were in the forest for the purpose of shooting hazel-hens. They were in a very thick brake, the usual resort for those birds, when one of

them suddenly came close upon the animal as he lay coiled up in his lair. The peasant had only small shot in his gun; and therefore, not thinking it prudent to fire, he retreated upon his companion, who was at some little distance. Both then loaded with ball, when they advanced up to the bear. In the interim, however, the animal had taken the alarm, and wisely walked himself off. There was the merest sprinkling of snow upon the ground at this time, from which cause the people were four days before they could succeed in encircling him. This bear was supposed to be the same of which I have spoken as having been in search of during the preceding The latter, or Tönnet bears, had, in the first instance, been disturbed from their den by two men who were felling timber in the forest, but, owing to the ground being bare of snow in places, it took two days before they could succeed in ringing the animals.

At this period I was without an attendant; but as there was now no time to be lost I forthwith proceeded to Jan Finne, of whom I have made honourable mention, to obtain his assistance in attacking the bears of which I had just received intelligence. This man resided in a very wild and desolate part of the forest, at about thirty-five miles to the north-west of Lapp cottage; but, on my reaching his habitation, I was sorry to find he was absent from home. On the following day, however, I was fortunate enough to fall in with him at Tönnet; near to which place the she-bear, with her cubs, were ringed. As the ground was then nearly bare of snow we did not think it advisable to attack those animals at that time; as, had we roused, and not succeeded in killingthem, it was not improbable their tracks might have been lost, and that in consequence they might have got off altogether. Jan Finne and myself, therefore, separated for our respective homes; but I gave him orders to meet me at Tönnet the moment there should be a fall of snow, which, from the advanced state of the season, we thought could not be very far distant.

On my return to Lapp cottage, I found the most celebrated of the Dalecarlian chasseurs awaiting my arrival. This man's name was Jan Svensson; he was between fifty and sixty

years of age, and blind of one eye, it having been knocked out in the forest at a time, it was said, when his head was too full of brandy. He was small in person, but his heart lay in the right place. He had been accessory to the death of sixty or seventy bears, very many of which he had killed himself. At this time, however, his day was passed; for, probably in consequence of a too great indulgence in his favourite liquor, he was little capable of any severe exertion; and though not very far advanced in life, he had the appearance of a worn out and decrepit old man.

Svensson had been twice wounded by bears, once under the following circumstances:-On a certain occasion himself and five or six other peasants had ringed a very large bear, which had previously been much hunted and shot at, when, placing his companions in ambush around the ring, he advanced alone upon the track of the animal for the purpose Svensson had a capital dog, which, the of rousing him. moment it was slipped from its couplings, dashed towards the bear, and soon had him on foot. As Svensson had anticipated, the beast made towards his companions, one of whom got a shot at and desperately wounded him in the side; the ball, indeed, only missed his heart by a few inches. injury the bear quickly revenged, for, dashing at his assailant, whose efforts to escape were fruitless, he laid him prostrate, and wounded him severely in the arms and back; indeed, the poor fellow would probably have been minus his scalp had it not been for his hat, which the animal perforated with his teeth in seven different places. There the mischief as regarded this man ended, for the attacks of the dog at last caused the bear to leave his fallen foe. The beast now retraced his steps into the ring, and soon came in contact with Svensson, who happened to be following upon the animal's tracks. He was in a gallop, and came end on, to use the man's own expression, like a horse; but when he was at about thirty paces distance Svensson discharged his rifle, and with so good an aim that the bear directly fell. Svensson might now have got out of the way with every facility; but, thinking the bear was either dead or desperately wounded, he commenced reloading his rifle; he had only placed the powder in the barrel, how-

ever, when the animal got on his legs again, and fixing his eyes upon him, made right at him. Svensson now endeavoured to elude the attack by springing on one side, a manœuvre which is often attended with success on like occasions, but the bear still kept pursuing him, and two or three doubles that he made were equally unsuccessful. Finding escape was impossible, Svensson therefore stood still, and when the bear came up to him, which he did on all-fours like a bull, he attempted to drive the muzzle of his gun down the throat of the enraged brute. But the bear laying hold of the gun, instantly wrested it out of Svensson's hand, when, seizing him by the arm, he bit him severely. The dog was not an idle spectator of what was going forward; for, seeing the jeopardy in which his master was placed, he gallantly fixed on the bear's hindquarters. To get rid of this assailant, however, and not caring to quit his hold of Svensson, the bear threw himself on to his back, making with the one paw a dash at the dog and with the other holding Svensson, who was of course uppermost, fast in his embraces. This he repeated three several times, handling the poor man, to use his own expression, with as much ease as a cat would a mouse. the intervals between these manœuvres he was either occupied in biting Svensson in different parts of the body, or he was standing still as if stupified with the desperate wounds he had received. In this dreadful situation Svensson thinks he must have remained for upwards of half an hour, and during all this time his gallant dog never ceased his attacks on the bear for a moment. At last the bear quitted him, and moving slowly to a small tree, at a few paces distant, seized it with his teeth; but he was in his last agonies, and presently fell dead on the ground. Some little time afterwards several of Svensson's companions came up to the spot, which they had previously been prevented from doing in consequence of the distance and the loose state of the snow. Only one of them was near enough to have rendered him assistance. This was the man the bear had previously so much injured, who was thought by Svensson to have received his quietus, both as regarded the inclination as well as the ability to assist him.

On this occasion Svensson was wounded in thirty-one

different places, but principally in the arms and legs. At one time the bear seized him by the stomach, but luckily only carried away some of his clothes with his teeth. All the wounds were inflicted with the teeth, and none with the claws, which is a little corroborative of what I have said when speaking of the manner in which a bear makes his attacks upon the human race.

On examining the bear, it was found that Svensson's balls—his rifle having been loaded with two, a common custom in Scandinavia—had gone almost into the same hole. This was just between the eyes; but from the balls being very small, though they had fractured, yet they had not penetrated the skull. Had they taken effect an inch higher, where the bone is thin, the beast would have been dead in an instant.

If anything was required to show the insufficiency of small balls for bear-shooting, what I have just related must, I think, set the matter at rest, for I take it, if Svensson's balls had been of a moderate size, they would have shattered the skull to pieces, and in consequence, have saved him the dreadful mauling he was destined to endure. This same bear had in the early part of the winter most desperately wounded a man in the parish of Appelbo, in Dalecarlia, who, with several others, was pursuing him; and of the injuries he received on that occasion, it was supposed, he died sometime afterwards.

In the other instance, when Svensson was wounded, it happened in the following manner:—Along with several others, he was one day pursuing a she-bear, whom they had deprived of her cubs on that very morning; but their dog not keeping well up with that animal, and not knowing, in consequence, where she was at the moment, they suddenly came to within a few paces of her in a thick brake. The beast, on getting sight of the party, set up a hideous growl, and dashed at them at the top of her speed. They were taken completely by surprise, and as their guns were not in readiness, they were unable to offer any resistance. The first man the bear made for, avoided her attacks by throwing himself into the snow; but Svensson was not so fortunate, for unable to get out of the way, she quickly laid him prostrate, and wounded him in several places. His dog, however, saved

Svensson on this occasion from farther injury, for coming up to the scene of action, he fixed on the bear, and caused her to leave the poor fellow. The beast then went off at the gallop over Svensson's body, and he described her weight to be none of the lightest, when she was presently lost sight of in the thicket. On this occasion the bear made good her retreat, though a few days subsequently, Svensson and his companions managed to kill her.

But to return to our own bear chasse. Since the night of the 31st October we did not experience one iota of either snow or rain, which was a rather singular circumstance at that season of the year. December, however, to my great satisfaction, was ushered in with a storm of snow, and by the middle of the day the ground was covered with it to the depth of four or five inches. This was a gratifying sight to me, and thinking it was now time for action. I made the few requisite preparations, and on the evening of the same day, together with Svensson and my dogs, I was off in my sledge for Tönnet, which Jan Finne and myself had fixed upon as the My sledge, which was built in place of our rendezvous. Finland, differed altogether in shape from those in common use in this part of the country, and was so long that I was enabled, if I pleased, to recline at nearly my full length. In fact, with the addition of a bear-skin thrown over the back of the sledge, it was the most luxurious vehicle imaginable, and very superior indeed, in point of comfort, to any wheel-carriage, in which it was ever my fortune to ride. To the harness, as is customary in the North of Europe, a set of bells were attached, the music of which was not only very pleasing to the ear; but it served to warn others of our approach, which, from our gliding so silently over the snow, would not otherwise have been perceptible at times.

The scenery on our way to Tönnet much resembled that in the vicinity of my quarters. The valley through which the Klar, whose course we followed, meandered was studded with little farms and hamlets, and where the soil was favourable it was in a tolerable state of cultivation; whilst the hills, which on either hand rose to a considerable height, were covered with boundless forests of pine; but instead of the wild waste of evergreens which presented itself to the eye on the preceding day, all nature was at this time wrapped in her wintry mantle of snow, which made the contrast very striking.

The Klar was now generally frozen over, and our route often lay along its surface, but the ice was not in a very secure state; indeed, we occasionally passed immediately near to holes where the water was entirely open. Many of these openings in the ice were owing to the rapidity of the stream preventing the water from congealing; whilst others, called windwak, were supposed to originate from air that had either been confined beneath the surface of the ice when congelation took place, or that subsequently found its way there.

The succeeding morning was fine and frosty; but Jan Finne not being forthcoming, and being careless of losing the advantage of such favourable weather, I struck into the forest to the eastward of Tönnet, in search of capercali. My guide on this occasion was a peasant, named Per Jonsson, an excellent shot with his rifle, and the best chasseur to be found thereabouts. We had not proceeded far, however, before he halted so suddenly, and in so peculiar a manner, as almost led me to suppose that he had seen either an apparition or a drove of wolves; but, on questioning him as to the cause of his panic, it turned out he had viewed in the distance a poor decrepit old woman, "outlived," as he called her (utlevad kärring); and from this being the first human being that he had set his eyes upon since we had started, he drew the most unfavourable prognostics as to our chances of success. stated it next to useless for us to proceed, alleging as a proof of such being the case, that some few days before, when on a like expedition, he had encountered a similar bad omen; and in consequence, though he fell in with a good many birds, and wasted no little powder and ball, he was never able, from their being "charmed," to touch a feather.

On another occasion, when I was travelling, I remember my driver pointing out to me a huge fragment of rock lying near to the roadside, on which, he stated, the impression of a hand and that of an iron chain were deeply indented. He accounted for these marks in a singular manner. An evil spirit, he said, once dwelt in a cavern, near to the summit of a lofty hill in

the vicinity; but feeling very indignant at hearing the neighbouring church-bells chiming, as they were wont to do on Sundays, he put his missile in a sling, and threw it with all his force at the steeple. The demon missed his mark, however, and the rock, passing a mile beyond the church, fell at the place where I saw it deposited. My informant seemed fully to believe this, as well as other similar stories, of which he had treasured up a sufficiency, that he narrated.

Mr. Greiff says that "some of the peasants are so simple as to go twenty or thirty miles to find out a spring which runs to the north, in order to let the spring-water run through the gun-barrel, while they in the meanwhile say, 'Shoot west -shoot east-shoot south-shoot north,' when the cure is It is also considered a good cure for a gun that does not kill, to put a serpent into the barrel, and shoot it out: in doing which, it has also happened that many barrels have been burst. Several other such fooleries might be mentioned." That gentleman states "that the peasantry in general believe in witchcraft, and that a good and lucky sportsman can shoot as much as he wishes, and call to him beast and bird as soon as he has attained to that degree that he has become acquainted with the Lady of the Wood.—Once from necessity," he says, "I had occasion to show my art of witchcraft. I had by means of my good partridge-dog brought to a stand and shot three deer, of which two lay on the spot and the third at a Three peasants, with hatchets to fell trees short distance. thereabout, came in a friendly manner and saluted me. They knew me well; but when they began to consider whether it was not their land on which the deer lay, I was necessitated to let them understand that I was acquainted with the Lady I had my horses at a hut a short way off, of the Wood. whence I was obliged to fetch them, in order to carry away the deer as fast as possible. In the meantime, I requested one of the peasants to remain, after I had with much ceremony, in the sight of all, plucked a tuft of hair from the largest deer and laid it on the gun-case, gone three times round each deer, and laid a cross on them of wooden pegs, which were split in three places at one end. I then directed him who stayed behind to seat himself on the deer until I returned, that no harm should happen to him, which advice he took and followed, and I carried off my deer without opposition."

I mention these anecdotes to show that the Swedish peasantry, like our own, are far from being exempt from idle and superstitious notions.

## CHAPTER XIV.

The Bears at Tönnet—A Horse seized by a Bear—Bears
Frustrating Escape—The Speed of the Bear—Havoc
among Cattle—Capercali Shooting—Renewed Pursuit of
the Bears—The Search—Search Continued—The Bears
Scented—The Death—A Hurricane—The Return—Skinning and cutting up—The Skin.

My guide's brother, whose Christian name was Lars, during the early part of the preceding summer, met with a rather singular adventure; the scene of it lay at only some eight or nine miles to the north-east of Tönnet.

One morning, at a very early hour, he and another peasant proceeded to a "Svedgefall," in the vicinity of a "Sätterwall," where they had quartered during the preceding night for the purpose of shooting hares, as, in such situations, for the sake of feeding upon the young grass, these animals are commonly to be found in the spring of the year. At this pasturage several horses were grazing, one of which a large bear had that instant attacked and desperately wounded. With one of his terrible paws the ferocious brute kept his hold of the poor horse, whilst with the other he was endeavouring to retard his farther progress (for being a rather large and powerful animal he succeeded for some little distance in dragging his enemy along with him) by grasping at the surrounding trees. On seeing the peasants, however, making towards him—for there was little cover in the immediate vicinity of the spot—the bear

quitted his hold of the horse, and retreated into the adjoining forest, and there also the latter took refuge. But the bear was not to be so disappointed of his prey, for by the time the peasants had penetrated a short distance into the brakewhich they did rather under the idea of rendering the horse the assistance of which he stood so much in need, than of again seeing the bear—the latter had renewed his attacks upon the poor animal, who now, from being already disabled from wounds and loss of blood, was soon brought to the ground. The beast's career, however, was speedily at an end, though this was not until the horse had received so much injury that he died shortly afterwards, for the peasants, coming up to the spot in double quick time, presently succeeded with their guns in destroying him. This bear was supposed to be the same that had committed several similar depredations a short time previously; and his skin, which was a moderately large one, subsequently came into my own possession.

Circumstances something similar to the above not unfrequently happen in the Scandinavian forests; and I have heard it asserted that the bear, when thus carried along by the horse, and when in his attempts to retard the progress of the poor animal, by grasping with one of his paws at the surrounding trees and bushes, not uncommonly tears them up by the roots. Should the bear succeed, however, in catching hold of a tree that is firmly embedded in the soil, it is then all over with his victim; for, owing to his enormous muscular strength, the career of the horse is at once stopped, and he is quickly brought to the ground.

It seems rather extraordinary that so clumsy and ill-shaped a looking brute as a bear should be able to run down a horse; but such, whether owing to the fears of the animal, or to the advantages of ground, is beyond doubt of every-day occurrence. Until he has brought his victim down, it is said, the bear seldom makes use of his teeth, but strikes his prey on the back and sides with his terrible paws, as if with a sledge-hammer. Sometimes I take it, the horse, by flinging out behind, makes his escape, for it is not an uncommon circumstance for a bear to be killed wanting an eye or a fang, which the peasants

suppose, and with some reason, has been caused by the heels of horses.

Now and then a horse is to be found in Scandinavia that is not afraid of a bear, and I have heard of more than one instance where that useful animal has defended himself successfully against the attacks of those ferocious brutes. On these occasions, it is said, the bear keeps wheeling round the horse with the endeavour to take him at disadvantage; whilst the latter parries the assaults of his assailant as well with his fore-feet as with his heels. The scene of action is therefore usually confined to a small space, and from the manner in which the ground is trodden down, and turned up, about the spot, there is reason to suppose these apparently unequal contests have at times been of hours' continuance. I heard of one horse, in particular, that had in several instances greatly distinguished himself in these combats with Bruin.

The wounds that the bear inflicts upon cattle, when he attacks them, are sometimes dreadful to look upon; indeed, I myself saw a living horse that had been within the clutches of one of those ferocious brutes some few days previously, but from which he had been rescued, owing to an accidental circumstance. In the back and neck of the poor steed, were holes of such a size that, without exaggeration, I could almost have buried my hand in them. This horse died a few days subsequently.

The sufferings of animals, when attacked by a bear, or other wild beast, must often be horrible. I have heard of nearly the whole of the hind-quarters of a cow or a horse having been actually devoured, and yet the poor creatures had been found alive.

To proceed.—Though my guide and myself beat a considerable tract of ground during the day, we only fell in with a very few capercali; but I was fortunate enough to bag three of those birds in spite of Per's predictions to the contrary. There was much snow in the trees at that time. This was greatly in our favour, for the vision of the birds being thereby obstructed, we were enabled to approach them the better, when my Brunette challenged to them in the pines. In the evening, when we had twenty-two degrees of cold, we returned to

Tönnet, where shortly afterwards Jan Finne made his appearance.

As there were now four or five inches of snow upon the ground, and of course a sufficiency for tracking, we determined upon beating the ring for the she-bear and her cubs; but we were not by any means certain that those animals were within it, for subsequently to their being encircled some three weeks previously, the forest had in places been altogether bare of snow, so that they could have moved themselves off to another part of the country, without leaving a track behind them. As the ring, however, was at seven or eight miles distance from any habitable part of the country, and the days short—for the sun at this time did not rise until nine in the morning, and set again at three—we determined on taking some little baggage and provision with us, and of quartering at a Sätterwall in its vicinity.

On the succeeding morning, when there were twenty-two degrees of cold, we set off for the scene of action. On this occasion we took a horse and sledge along with us, for the better conveyance of our baggage. Our party, including myself, consisted of five persons, viz., Jan Finne, Svensson, and two peasants who had ringed the bears. Only Jan Finne and myself, however, were armed with guns, the rest of the people being simply provided with axes. We had no regular road; but from the lakes and morasses which lay in our course being now firmly frozen over, the track we pursued was far from being a bad one; but owing to the snow having so recently fallen, and to its having drifted much in places, our progress was not very rapid, so that it was between ten and eleven o'clock before we reached the Sätterwall, where we proposed taking up our abode. This was situated on the face of a hill, overhanging the western side of a fine and picturesque lake called the Moss. Here there were two small tenements, one of which I appropriated to the accommodation of the people, whilst in the other I caused my own baggage to be deposited.

We now put our quarters a little in order, when, after taking some slight refreshment, and after despatching the two peasants to procure wood and water for the ensuing night's consumption, Jan Finne, Svensson, and myself, started for the ring. This, which could not have been less than some three miles in circumference, was fortunately near at hand; indeed, the southern extremity of it extended up to the few enclosures which surrounded the Sätterwall. Jan Finne and myself, as I have said, were armed with guns; but we had no other weapons, offensive or defensive. Indeed, though at one time I was in the habit of carrying either a dagger, a light hunting-spear, or pistols, when on these expeditions, from finding such materially to retard my movements, I subsequently went without any of these accompaniments.

We left the dogs at the Sätterwall. Our plan of proceeding, in the first instance, was to beat the most likely brakes within the ring (of which, from having spent much time in that part of the country on a former occasion, I had a very good knowledge) in the most perfect silence; this gave us the better chance of coming in upon the bears before they had either time or inclination to leave their quarters. For this purpose we formed a line, in the centre of which I placed myself, Jan Finne and Svensson being at some ten paces distance on either hand of me. Thus we slowly and cautiously proceeded forward, threading on our way the most tangled brakes. Some of these were so thick that we could with difficulty force our way through them; in fact, they in a degree resembled fir plantations of ten or twelve years' growth, which had never been thinned, or in which the pruning-knife had never been introduced.

All this while we kept peering under every stump and fragment of rock that came in our way to see if the game of which we were in search might be lurking beneath, for in such situations the bear not unfrequently reposes during the winter season. The trunks of the pines likewise we narrowly examined, for in the vicinity of his den, or even at a very considerable distance from where he thinks to take up his quarters for the winter, the bear usually scores the trees, either with his claws or fangs. If such marks are fresh (though why made I know not) it is an almost certain indication that the animal is not far distant. The smaller pines, also, we carefully noticed, as from these the bear commonly

breaks off many small branches for the purpose of carpeting his lair. In the immediate vicinity of his den, I have seen trees much thicker than my arm which those animals have severed into two with their fangs. Any little apparent rising ground or hillock, likewise, that we saw we did not fail to examine; for it often happens that the bear scrapes together a large quantity of moss and forms a lair for himself above ground. This, which in Sweden is called his Korg, is not very dissimilar in appearance to a bird's nest; and though generally of a very considerable size, it may almost be passed by unnoticed when covered with snow.

We also reconnoitred the ant-hills which came in our way. These are often of an enormous size in the Scandinavian forests, for buried, or partially so, in them the bear not unfrequently passes the winter months. Mr. Nilsson says, "The bear sometimes forms his nest in a large tree, in the fork between three or more branches, into which the trunk divides itself; these lairs, however, are never more than six feet from the ground." This I never knew to happen; indeed, I am not aware that I ever saw a tree in the northern parts of Scandinavia that would at all answer the required purpose.

The forest was at this time full of snow, so that in the closer cover we were almost smothered, as it came down upon us from the trees at every step we took; but the interest excited by the possible chance of stumbling upon the bear made this evil to be little thought of. To protect his rifle from the snow, therefore, Jan Finne carried it, as is customary among the Scandinavian chasseurs in the winter-time, in a leathern case, which he either slung across his shoulder or bore under his arm. Though I was provided with a similar covering for my own gun, I preferred having it loose in my hand, that it might be in greater readiness in the event of our coming suddenly upon the bears. But for the better security of my lock and the adjacent parts, I had taken the precaution to cover them with a piece of leather of some eighteen inches in length by twelve in breadth. This was rather a good contrivance; for instead of having to carry my gun under the skirts of my coat, where it was still very liable to get wet, or

to fumble for a minute or two to get it out of a case, I had nothing to do but to cast this leather to the one side, and in less than a second I was fit for action. When snow comes in contact with the lock of one's gun it quickly melts if there be only a few degrees of cold. If, however, the frost is very severe, it may be brushed off like so much powder. It is most difficult to guard against the effects of new-fallen snow in consequence of its adhesive nature.

All our exertions to find the bears were of no avail; indeed, though we spent several hours in the search, we could not observe any indications that led us to suppose that those animals might be in the vicinity.

On the following morning, when the quicksilver, as on the preceding day, was twenty-two degrees below the freezing-point, we were all up at an early hour, and as soon as we had sufficient daylight, again started for the ring. On this occasion, we took both our peasants and dogs with us; for as it now seemed rather problematical whether the bears were within the ring, we thought it best to search it out as soon as possible, for this reason, that, in the event of those animals having moved themselves off, we might be enabled to beat the forest in the immediate vicinity, where it was not improbable they might still have taken up their quarters.

On this, as on the preceding day, we formed a line, Jan Finne being at one extremity, and myself at the other, whilst Svensson and the peasants filled up the immediate space: we then slipped the dogs from their couplings, and allowed them to range at large.

On the previous afternoon, we had beaten the ring from north to south; but thinking it possible that we might have gone over the bears, we now traversed it in regular and close order from east to west, and thus at every point intersected all our old tracks. Up to one o'clock, however, we met with nothing, and we then began rather to despair; but thinking at that time a little rest and refreshment would do us no harm, we halted and lighted a roaring fire. This was readily effected, for our party was provided with more than one axe, and each of us had a flint, steel, and a species of fungus, which fully answered the purpose of tinder. When wandering

in the forest, I was very seldom without these essential articles.

The fire was a great comfort to us, as it not only guarded us against the effects of cold, but it enabled us to dry our clothes; for, owing to our exertions, and to the snow melting upon our persons, these were partially wet through. Very little snow penetrated down my neck on this occasion, the lappet attached to my cap, of which I have spoken, throwing off the greater part of it. My people stood little in need of a similar protection, for their long hair falling over the collars of their coats, answered the purpose nearly as well. We now regaled ourselves on the frugal contents of our knapsack; but in this was a flask of brandy, a most valuable thing in the eyes of a Scandinavian peasant. When our homely repast was finished, the people as usual indulged themselves with their pipes—an accompaniment a Swedish peasant in the interior is seldom without.

After resting for about half-an-hour, we again resumed the search for the bears, which we continued until near three o'clock, and until it was beginning to get dusk. At this time I was to the right of the line, which was proceeding in a westerly direction; when, in the distance to the northward, and in a part of the forest we had not yet beaten, I heard my old dog Paijas giving tongue; this he did in such a manner that I had more than a suspicion that he had found what we had so long been in search of. I now lost not a moment, but, leaving the people, ran as fast as the broken nature of the ground would permit towards the spot where the dog was challenging, which might be at one hundred and fifty to two hundred paces distance. This was in a rather thick part of the forest, and in a clump of pines, around the foot of which, though at some paces distant—for he probably remembered the rough treatment he had received upon a former occasion-Paijas still kept furiously baying. Though the dog had found the bears. I did not at the first moment observe the entrance to their den, which was an excavation in the face of a little rising situated between and partly formed by the roots of the surrounding trees. But on discovering it, I at once sprang on to the top of the hillock; and though at that time immediately

over the den, the bears still remained quiet. On my hallooing, they felt so little inclination to leave their quarters, that the old bear simply contented herself with partially projecting her snout. At this, from its being the only point exposed to my view, I levelled my rifle, which was then pointed in a perpendicular direction. On reflection, however, I refrained from firing, as I considered that though I might have smashed the fore part of her head to pieces, there was little chance of my killing her outright. Instead, therefore, of firing whilst in that situation, I stepped (and it certainly was not "the most prudent step" a man ever took), with my left foot in advance, directly over her, to the opposite side of the hole, when wheeling about on the instant, and having then a full view of her head, from which the muzzle of my gun was hardly two feet distant, and my left foot still less, for it was partially in the entrance to the den itself, I sent a bullet through her skull.

I now called loudly to the people, none of whom, nor even the other dogs, which had been questing to some birds in another part of the forest, had as yet come up-for I was rather apprehensive the cubs might attempt to make their escape. To prevent this, I stood for a while over the den in readiness to give them a warm reception with the butt-end of my rifle. But three or four minutes elapsed before Jan Finne, who was to the left of our line. Svensson, and the peasants. made their appearance; for strange to say, though Paijas had been in Jan Finne's possession for several years, he either did not recognise his challenge, or he had not a suspicion it was to the bears; and in consequence, neither he nor the people moved from where I had left them, until they heard my shot. My apprehensions as to the cubs attempting to escape, were, however, groundless, for they still continued quiet; at first, indeed, we could see nothing of them, for the old bear, who, as is usual with those animals when they have young, was lying in the front of the den, and we, therefore, almost began to think we had hit upon a bear distinct from those of which we were in search. But on the people introducing a stake, and moving the old bear a little to the side, one of the cubs, and subsequently a second, and a third, exhibited themselves, all

of which I despatched, either with my own or with Jan Finne's rifle.

The work of death being at length completed, we drew the bears out of their den. This however was of such small dimensions, that it was the admiration of us all how they could have stowed themselves away in it. Bears usually prepare their winter-quarters during the autumnal months, and some time previously to taking possession of them; but the animals, of which I am now speaking, having been disturbed from their original lair at a time when the ground was hard frozen, and when it was, of course, much more difficult to embed themselves in the earth, probably accounted for the small size of the excavation in which we found them. The old bear had attained her full growth; the cubs were nearly a year old, and of about the size of large dogs. The whole of them were in tolerably good condition.

This was a rather successful chasse; as, had the bears been quartered in an open lair, instead of the situation in which we found them, from the dog being so far distant from us when he first challenged, it is most likely they would have moved themselves off long before we could have come up. Indeed, as it was, had I not been rather quick upon them, it is very probable they would have given us the slip for that time. She-bears with cubs, however, usually lie much closer than others.

After indulging the people with a glass of brandy, I lost no time in despatching one of the peasants to Tönnet, that he might have two sledges in readiness at an early hour on the following morning; one to convey the bears to that place, and the other my little baggage; for, having accomplished our object, I purposed forthwith retracing my steps to Lapp Cottage. The shades of evening had by this time long set in; so, after covering our spoil with a few pine branches to keep off the weather, we once more made for the Sätterwall.

During the night, the wind having veered to the southward, the frost disappeared, and a very heavy storm of wind, rain, and sleet, came on, which continued with unabated violence for very many hours afterwards. This made us congratulate ourselves not a little on the fortunate termination of our

expedition: and we had still more reason to do so a few days subsequently, when the ground in most places became altogether bare of snow. In fact, had we not killed the bears on this occasion, it is not improbable that they would have escaped altogether.

Long before daylight on the following morning, and during almost a hurricane of wind, attended with sleet and rain, our peasant, with two sledges (one of which was driven by my superstitious guide, Per) arrived from Tönnet.

It took us, however, some time to get the bears out of the forest, as to effect this we had in places to clear away the underwood, to open a passage for the sledges. Some manœuvring also was required to prevail upon the horses to approach the bears; for though the beasts were dead, the poor animals seemed to have an instinctive dread of them. To accomplish this object we took the horses from the sledges, when, after laying the bears upon the latter, and covering them with pine branches, so that nothing was visible, we backed those useful animals upon, and attached them to, the vehicles. Some delay took place whilst this was going forward, and in consequence, the day was well advanced before we took leave of the Sätterwall and faced towards Tönnet. Our journey was a comfortless one, as it was raining or sleeting the whole way.

On our reaching that hamlet, at about one o'clock in the afternoon, we were surrounded with groups of people, whom curiosity to see the bears had drawn to the spot. They joyfully greeted us on the success of our little expedition, as those animals committed much slaughter among the horses and cattle in all that part of the country.

The bears now underwent the process of skinning and cutting up; and as the weather was unfavourable the operation took place within-doors. The animals were laid on their backs on a table, and, when divested of their skins, they much resembled, in many respects, their breasts and arms in particular, so many human beings. The sight, in consequence, was a rather shocking one, and forcibly reminded me of a disgusting exhibition I had witnessed, a few years before, at a celebrated anatomist's in London. The horrors of this

indeed—the macerating tub with its attendant vulture,—will never, I think, be effaced from my imagination. The fore-legs of the old bear were uncommonly muscular; and, indeed, after seeing them a person might readily have believed in the amazing prowess ascribed to bears. The state of the intestines of the animals was as I have described in the beginning of this work. The galls we carefully preserved; those being considered in Scandinavia a specific against a variety of disorders; the like was the case with the fat, which is as highly esteemed in Sweden as with us. This, some one says, is possessed of such extraordinary virtue that, if a deal-box be rubbed with it overnight, on the following morning it will be converted into a hair-trunk. Only the fat, by the by, which is found about the intestines, is used in Scandinavia medicinally, or for the hair: of this there is usually but an inconsiderable quantity. The fat (fet) itself, which, on a large bear, may weigh sixty or eighty pounds, is merely used for culinary purposes. The bears' grease we purchase in this country, if bears' grease it really be, is, I have reason to believe, concocted out of the whole of the fat found upon those animals. The hams (those at least that I took possession of) were destined to be smoked. In that state they are considered great delicacies. The remainder of the carcase was either salted, or reserved in its then state.

When fresh I consider the flesh of the bear, which sometimes resembles beef, to be excellent. Indeed, during this particular winter it constituted a principal part of my food: the paws are thought to be a great dainty.

The skins of our bears were now nailed to the sides of a warm room; the fat was then scraped from them, and afterwards a little salt and water, as also wood-ashes, were applied, that they might dry the sooner. The skin of the old bear was about eight feet in length, and of a proportionate breadth. In taking the skin from a bear the knife is not passed along the stomach farther than to within some few inches of the insertion of the tail; this gives the skin, when dried and extended, a handsome and more compact appearance. The claws are allowed to remain on the skin, which add much to its beauty.

In the interior of the country the weight of a bear, either from want of curiosity or opportunity, is rarely ascertained; the peasants, however, when speaking of the size of the animal, say their skins were of such a length. In this case, therefore, if a person wishes to form an idea of the actual dimensions of the bear, he must allow for the few inches of which I have just spoken. But this method of judging of the size of those animals, unless one actually sees the skin itself, is far from being satisfactory, for it not unfrequently happens, that, instead of being extended in the natural form, they are drawn out to a most preposterous length, when their width in consequence becomes excessively disproportionate.

The skin of the bear is in by far the best order in the winter time; if the animal be of moderate size, and killed at that season, it is worth, in Sweden, from two to three pounds.

As I had not made any previous stipulation to the contrary, the bears we had just slaughtered were the property of our two peasants. This was in consequence of their having ringed these animals in the first instance. I believe no actual law exists in Sweden to that effect, though it is a perfectly well understood thing in the interior of the country that the man who rings a bear is entitled to the animal, and in consequence, without express permission, no other person dreams of disturbing the beast. But in Norway, I have reason to think there is an ordinance making the bear the property of the man who rings him in the first instance; and in consequence, those who either disturb or destroy the animal without authority are subjected to rather severe penalties.

As my two peasants were very poor, I did not care to deprive them of too much of their booty; my own share of the spoil was, in consequence, trifling. Indeed, I only took possession of the fat, tongues, and a little of the flesh of the bears. They proved a rich prize to the people, for, independently of the flesh, which was much esteemed in that part of the world, the skins alone were worth about five pounds, which is a considerable sum in Sweden. In addition to this, they were entitled to a reward (Sköttpenningar) paid by the Government, or rather the particular district, for the destruction of pernicious animals.

Leaving Jan Finne and Svensson with the dogs at Tönnet, I set off in my sledge towards evening for Lapp Cottage, but owing to the thaw, the tract was not in the best order, and as I was also delayed for a horse on the way, it was rather late before I reached my quarters.

## CHAPTER XV.

Another Bear Adventure—Narrow Escape—Surprising number of Balls to a single Bear—Still another instance—Three Bears bagged—The want of Snow—Beating for a Bear at Sälje—The Chase—The Escape of the Game.

At this time, I was much gratified by a visit from an old and faithful follower of mine from Brunberg, a hamlet situated in the wilds of the forest, at some thirty miles to the north-east of Lapp Cottage; I was still more pleased, however, when he gave me the agreeable intelligence that he had a bear, which he supposed to be of a large size, "ringed" in the vicinity of that place.

This man's real name was Henrick Mattsson. He had been in the army, where, to prevent the confusion that would naturally arise from few or none of the common soldiers having surnames, fictitious ones are generally given to them such as the names of animals, birds, and trees; for this reason he had been dubbed Elg, or Elk, by which appellation he was only known throughout the country; and by such, therefore, I shall hereafter designate him. He was in the prime of life, not being at this time more than about thirty-five years of age; though short in person, he was of a stout and robust make, and able to undergo great fatigue. Though nearly unlearned, he was a most intelligent man, and possessed of much better information than many who might be called his betters. Among his other capabilities, he was a capital shot with his rifle, and an excellent runner upon snow-skates, of which implements I shall presently have occasion to speak.

I enter thus into particulars, as he was my constant attenclant during the remainder of this particular season, as well as on other occasions; and a more faithful and honest creature, which his countenance plainly indicated, or a better behaved man, I never met with in my life. Elg had been accessory at the death of eighteen or twenty bears, many of which he had shot with his own gun. He had never been wounded by any of those animals, though in the instance I am about to relate he had incurred some degree of danger. When he was only twelve years of age, and when residing with his father at Brunberg, the family were one night disturbed by the cattle, which were penned immediately near to the house; from the noise these made, it was pretty evident that an unwelcome visitor was among them. One of Elg's brothers, hearing this, jumped out of bed, when, catching up a gun that happened to be loaded, he ran out of doors, undressed as he was, to see what was the matter. The cause was soon explained, for he found the uproar to have arisen from the presence of an enormous bear, who had just helped himself to a goat, with which he was then in the act of making off. The man now fired; but though the beast was desperately wounded in the side, he was still enabled to make good his retreat.

The next morning Elg, in company with two of his brothers, both of whom were grown-up men, and of course many years older than himself, went in pursuit of the bear. They had not proceeded more than four or five hundred paces into the forest, which immediately skirted the few enclosures about the house, when a dog they had along with them challenged to the beast in some long grass, at about one hundred paces The animal was at this time lying upon the ground, and they therefore thought he was almost dead. When, however, they had approached to within about thirty paces of him, he suddenly reared himself up, and partly swung himself round; but whether this was done with the intention of attacking them, or making his escape, they of course had no means of ascertaining. On this Elg, and one of his brothersthe other from some cause not having the opportunity—fired, when both of their balls, as it afterwards appeared, took effect, Elg's in the hind-quarters of the animal, where, from its small

size, it could have done little injury, and his brother's in the shoulder, where, coming in contact with the bone, it flattened, and was equally inefficacious.

On receiving his wounds, the enraged brute instantly dashed at the party. Elg, in his fright, and the better to save himself, now threw away his gun, and ran for it, and luckily succeeded in making his escape. But his brother, that had just discharged his piece, was not so fortunate, for though he sheltered himself behind a tree, the ferocious animal quickly caught him in his grasp, threw him down, and wounded him severely. On witnessing this catastrophe, the brother, who had reserved his fire, ran up to within a very short distance of the scene of action; but until the dog, by his attacks, had drawn the bear a little on one side, he dared not shoot for fear of hitting the wounded man. When this was the case, however, he quickly drove a ball into the body of the beast. As this, unfortunately, did not take effect in any vital part, it only tended to make the animal more savage than before, for now leaving his prostrate foe, he dashed at his new assailant; but luckily the latter, owing either to his superior agility, or to the wounded state of the bear, was enabled to elude the onset. nevertheless, was not to be thus foiled, for finding he could not overtake his new antagonist, he returned to the wounded man, who was by this time on his legs, and attempting to get out of the way; but being unable to accomplish this, owing to his injured state, he was again severely lacerated.

Whilst this tragedy was acting, the brother, who had just fired, was not idle, for reloading his rifle as quickly as he was able, he once more ran in upon the bear, and sent another ball into his body. This again caused the animal to quit his prey, and to make after him a second time; but fortunately this was his last effort, for being now altogether exhausted with his wounds and loss of blood, after proceeding some short distance, he sunk to the ground to rise no more. It was still necessary, however, to send a ball through the heart of the beast, before his miseries were put an end to.

During the whole of this bloody scene, Elg was a very near spectator, for sheltering himself behind a tree, at a very inconsiderable distance from the place of conflict, he continued shouting with all his might, in the hopes of being able to drive the bear away from his unfortunate brother. He had no other means of rendering him assistance, having thrown away his gun, as I have said, at the commencement of the affair.

On this occasion, the poor sufferer received nineteen wounds in his back and other parts of his body. He did not recover from the immediate effects of these for many weeks, and indeed Elg seemed to think they tended materially to shorten his life, as he died a little time afterwards.

This bear was among the very largest that had ever been seen in that part of the country. When he was skinned and dissected, nearly twenty bullets, Elg stated, were found in different parts of his body, which he had received on former occasions. One of these balls, and it was of a rather large size, was in the lungs of the animal, where it had so embedded itself, that the point by which it had entered was no longer perceptible. The generality of these balls were, however, small, so that, in comparison with so large an animal, unless they took effect in some vital part, they would probably have little more effect than small shot.

From the number of balls this bear had previously received, it might almost be supposed he had, on some former occasion, escaped out of a skall; but possibly from being an old marauder, he had, in numberless instances, been shot at by the peasantry and others, when attacking cattle in different parts of the country.

In corroboration of the fact of this bear having recovered after being wounded in so many different places on preceding occasions, I remember Jan Finne telling me of a bear that was killed at Dynsjö a few years previously, in whose body four-teen old balls were found.

If the bear receives his wounds in the summer time, they are far more likely to prove mortal than if it be in the winter season. At the latter part of the year he will often recover, after being almost made a sieve of. This, no doubt, arises from his digestive organs being at rest, when his blood, in consequence, is in a less inflammatory state.

When Elg was only in the fourteenth year of his age, he dis-

tinguished himself in rather a remarkable manner. Along with another boy, still younger than himself, he was one day tending cattle in the summer-time, in the vicinity of Brunberg, when a large bear made a dash at the herd. attack, however, from some cause or other, proved unsuccessful. At this period, Elg was absent from the spot; but on learning from his companion what had happened, he lost no time in following in the direction the beast had taken when making his retreat. He was accompanied by a dog, a mere cur; but before he had proceeded any considerable way, the latter challenged to the bear in a thick brake. Elg now shortly descried his shaggy antagonist in the opposite side of a little ravine, at some twenty-five paces distant from where he stood; but the attention of the animal was so much taken up with the attacks of the dog, that he did not seem to notice his approach. Elg was armed with a gun—a mere plaything, as he described it—of only two feet in length, the lock of which was so defective that, when in the act of discharging the piece, he was obliged to hold the cock back with his hand; yet, with this he levelled, and fired at the breast of the bear, which happened to be turned towards him, and as luck would have it, to shoot the animal through the heart. Elg now lost no time in running home, from which he was at an inconsiderable distance, to relate his good fortune; but his story was hardly credited, until his father and others who accompanied him back to the spot, had been eye-witnesses to the effects of his prowess. This, for a mere child, was certainly a gallant action, though it was the less to be wondered at, as he had been bred among people, many of whom had made the pursuit of the bear a primary object of their lives.

A third instance, where Elg had been in some danger, was the following:—The place where the circumstance occurred, he pointed out to me during our wanderings together in the forest; but this was at an after period of his life, and at only five or six years prior to the time of my visiting Scandinavia. It was in the setting-in of the winter, and when the ground was but slightly covered with snow, that Elg and another peasant started off in company for a very wild range of country to the southward of Brunberg, in the hopes that they

might fall in with, and ring the track of a bear, this being, as I have said, the most proper season for that purpose. But their search proved unsuccessful; and after the lapse of four or five days, during which they had either bivouacked on the ground, or quartered at Sätterwalls, their provision being exhausted, they separated for their respective homes.

In the afternoon of the same day, and when Elg was alone, in a very wild part of the country, covered with much fallen timber and immense fragments of stone, he suddenly came upon the track of a bear; the next minute, and within a short distance from where he stood, he discovered in the cleft of a great mass of rocks the den of the animal. As he had no confidence, however (according to his own account), in the lock of his rifle, he did not care to go immediately up to the den, he therefore mounted a pretty high stone, immediately overlooking it, at about fifteen paces distant. From this position he discovered the bear lying fast asleep near to the entrance of the den, and as he got sight of her ear, under which (supposing the side of the animal's head to have been towards him, as he imagined was the case,) is one of the most fatal places, he lost no time in levelling and discharging his rifle. For a moment after he had fired the bear lay still, and, in consequence, Elg almost imagined she (for it was a female) was killed; had he thought otherwise, he would have had ample time to get out of her way, but presently the beast raised herself up, when, fixing her eyes steadily upon him, and uttering at the same a terrific growl, she dashed at him (to use his own expression) "with the rapidity of a bullet out of a gun," and was close upon him in almost the twinkling of an eye. Very fortunately for Elg, the stone on which he was standing was situated on a declivity, the after part of it being some five or six feet from the ground; down this, in his hurry to escape, he tumbled all but headlong; it was well he did so, for the bear, followed by two of her cubs, which were more than half as large as herself, almost at the same instant made her spring, and passed clean and far over him. In this situation Elg lay for a short while, frightened, as he said, almost out of his senses; when finding all quiet, and supposing, as was the case, that the bears from not seeing him had taken

themselves off to another part of the forest, he ventured to get up and to reconnoitre the den; he then discovered that besides the three which had made a leaping-bar of his person, a fourth had taken an opposite direction.

Though all four bears for this time made their escape, yet in the course of the eight or ten succeeding weeks, Elg, with the assistance of several other peasants, managed to kill the whole of them. On taking the skin from the old bear, which he described to have been of a very large size, he found the ball, which he had first fired at her, flattened out and set fast on the back part of her skull. By this it would appear that he had mistaken the position in which she was lying, so that, instead of aiming at the root of her ear as he imagined was the case, he had fired at her lengthwise. Had his ball, however, been of any moderate size, this would not have been of much consequence, for if his gun was properly loaded, I take it that, at so short a distance, her head must have been split to pieces.

These bears proved a rich prize: for their skins alone, independent of their flesh, produced about ten pounds, which was no inconsiderable sum in Sweden. This sum Elg was obliged to share equally with his companions, and in consequence his individual portion of the spoil amounted to a mere trifle—to much less, probably, than the value of the labour he had bestowed upon their capture. But the case would have been otherwise had his ball taken proper effect in the first instance, for the entrance to the den was so narrow, that had he killed the old bear, the cubs could not have escaped, and the whole sum the animals produced would, therefore, have been his alone.

But to proceed. As Elg stated that the snow was several inches deep in the country about Brunberg, I determined upon forthwith attacking the bear he had ringed near to that place, and of leaving the animal, formerly referred to, at Sälje, in which vicinity there was very little snow, alone for the present. On the evening of the same day, therefore, after making the few needful preparations, we proceeded on our journey in my sledge.

On reaching Sälje, which lay in our route, we sent for the

peasants who had the bear ringed near to that hamlet. These people were, we now found, very anxious to ascertain if the animal was still within the circle, as from the quantity of rain that had recently fallen, and from the ground having for so long a period been bare of snow, it was not improbable that he might have betaken himself to another part of the country. This is more particularly likely to happen in wet weather, as, if the water penetrates to his den, the bear very generally shifts his winter quarters.

We pointed out to the peasants the great risk that would be run by beating the ring when there was so little snow upon the ground; as, in the event of our rousing the bear, and not succeeding in killing him, should a fresh fall of snow take place immediately afterwards, his tracks might be obliterated, and we in consequence might lose him altogether. argument they would not listen, which was the less to be wondered at, as they had now waited so long for a fall of snow, that their patience was quite exhausted. The bear, however, was their property and not mine; and an immediate search of the ring was therefore determined upon. But as the weather was very lowering at this time, which indicated that a snowstorm was not far distant, they agreed to postpone our expedition until after the following day. We passed the night therefore at Sälje, though, as regarded myself, not very comfortably; for my apartment, which was merely intended for the summer, admitted the weather in all directions; and, as I was not very well provided with bed-clothes, I suffered not a little from the cold.

On the succeeding morning, when the thermometer indicated a few degrees of frost, Elg and myself, having nothing better to do, struck into the forest with our dogs, to the south-east of Sälje, in the hopes of getting a bear on foot. Our guide on this occasion was Abraham, the peasant who accompanied me during one of my summer excursions, and was one of those who had ringed the bear we were about to attack on the following day. But our search proved unsuccessful, for we were not fortunate enough to meet with a bear; nor did we see any indications that led us to suppose any of those animals were lying in the vicinity.



On the following morning, our party mustered at the first break of day, and shortly afterwards we set out for the purpose of searching the ring, which was at about seven or eight miles to the north-east of Sälje. As this, however, was several miles in circumference, and as we could not calculate upon beating it in one day, we provided ourselves with an axe or two, and a sufficiency of provision for a single night's bivouac in the forest. There were six of us altogether: the four peasants who had ringed the bear, all of whom were armed with guns, Elg, and myself. We were also accompanied by my dogs, Paijas and Hector.

On reaching the ring, which was after a walk of something better than two hours, we formed a line as at Tönnet, the people being at ten or twelve paces from each other. In the centre of this, with Elg to my right hand, I stationed myself. I now caused Paijas to be slipped from his couplings, for, being old, he seldom ranged very wide; and he besides rarely gave tongue to any other animal than a bear. As we could not depend so much upon Hector, who often kept far ahead, and who frequently challenged to hares and birds, we retained him still in a leash. I nevertheless gave instructions to the peasant who had the latter in charge, instantly to loose him in the event of a shot being fired. As I could fully rely upon Paijas, and as I thought it more than probable that he would be the first to come upon the bear, supposing the animal to be within the ring, I directed the peasants to halt in the event of the dogs challenging, and to allow Elg and myself to advance alone. Our movements would, by this means, be conducted with less noise, and in consequence we should have a much better chance of coming upon the beast, which the peasants described to be of enormous size, before he had the time or inclination to leave his quarters. After enjoining the most profound silence, we then commenced the search. Thus we proceeded very slowly forward for about a couple of hours. All this while we carefully examined the trees, to see if there were any indications by which we might have reason to suppose the bear was thereabouts. We also narrowly reconnoitred roots, fragments of rocks, and other suspicious objects that fell in our way.

At last we came to a very thick and tangled brake, when Elg, who was near to me, observed, "This is a likely place for the fellow to have taken up his quarters." These words were hardly out of his mouth when the gruff challenge of Paijas was heard at about a hundred and fifty paces in advance of us; and from the deep manner of his baying, I knew to a certainty that he had found the bear.

At this time there was the merest sprinkling of snow in the trees, or even upon the ground, and in consequence my rifle was out of its case, and altogether loose in my hand. No other preparation, besides divesting myself of my gloves, was therefore necessary, when closely followed by Elg, who was the bearer of my double gun, I pushed as quickly forward as the thickness of the cover would permit towards Paijas. the brake was so close, that it was not until I was within fourteen or fifteen paces of the bear, that I could get even an indistinct view of him. He was in an open lair, composed of moss, which was altogether above ground, and situated at the foot of a large pine. At some ten paces distance from the beast, Paijas stood baying most furiously. The dog, however, probably remembered the severe handling he had received on a former occasion, as he did not dare to go very near to the animal. At this period the bear had only his head over the side of the lair. Though this was partially veiled by the intervening trees, it looked as large as a bushel-basket. deed, from the size and formidable appearance of the fellowboth probably magnified by my fears—I had no longer any reason to wonder that, when the peasant first fell in with the animal he should have thought it prudent to walk off, rather than to make use of small shot, with which his gun was at the time loaded.

Though in our progress through the brake, Elg and myself had naturally made some little noise, the bear did not seem to notice our approach, his attention, apparently, being altogether taken up with Paijas, who, now that he saw us advancing, bayed ten times more furiously than before. At this time the beast kept moving his head from the one side to the other of his lair, as if at a loss to understand the cause of the uproar. Thinking there was no necessity to be in any very

great hurry, I deliberately levelled my rifle at the root of his ear, the most vulnerable point then exposed to my view; but at the instant I was going to pull the trigger, he changed the position of his head, and exposed his front towards me. then aimed at his forehead; but the moment I was thinking to split his skull open, he all of a sudden bolted from his lair. and in almost the twinkling of an eye, he was out of my sight. In the act of making his spring, and from his shaggy jacket, he looked as large as a pony. I sent a ball after him; but, as I thought he was making to the left, whereas he went directly from me, I am inclined to think I shot wide of him, and that he escaped unhurt. The quickness and agility with which the fellow sprang from his lair astonished me. Indeed, I can only liken it to the action of the wooden frogs, that have their tails fastened down with wax, with which children are in the habit of amusing themselves.

The peasants, who were in the background, on hearing the shot, now slipped Hector from his couplings, who, together with Paijas, then went off after the bear. Elg and myself, also, when I had reloaded my rifle, pursued at our very best pace. At this time it was blowing from the southward, and as the beast happened to take in a northerly direction, he, of course, went down the wind. This was an unfortunate circumstance, as it prevented us from hearing the challenges of the dogs in the distance, and, consequently, from making many a short cut; the brute, besides, took through the country, in a direct line, without making a single double. From these causes we were necessitated to follow upon his tracks, which, from their being hardly perceptible in places owing to the want of snow, caused our progress to be much slower than it otherwise would have been. We continued the chase, nevertheless, for about an hour, when the dogs falling to heel, and seeing the improbability of coming up with the bear, we thought it best to give up all farther pursuit for that time, and to endeavour to ring the animal afresh. This is not usually a difficult task, as, if the bear after being roused from his den in the winter season be left unmolested, he commonly prepares another lair for himself in less than twenty-four hours afterwards. We now lighted a fire to guard ourselves against

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getting chilled, for we were much heated with the violent exercise we had taken, and when the peasants came up, which they did shortly afterwards, we were glad to break our fast by feasting on the contents of our knapsacks. The result of this chase more than annoyed me, for, had I fired in my usual quick manner in the first instance, it is not improbable I might have put an end to the bear. But by attempting to place a ball with mathematical precision, I took too much time, and the animal in consequence got off unhurt. This was not the worst part of the business, for, in the event of a snow storm, with which we were every instant threatened coming on, there was every probability of the tracks of the animal being lost, and that he in consequence would escape altogether. Had this happened I should have been abused by every one for rousing the beast, which, it was supposed, was the same that for several preceding years had committed great ravages between the Klar and the Knon, when there was so little snow upon the ground.

It was now about two o'clock in the afternoon, when the peasants, seeing the chances were in favour of the bear, became anxious to sell me, which they had hitherto declined doing, all right and title to the animal. But the weather then bore too lowering an aspect to allow of my entering blindfold into such a speculation. I nevertheless offered them a certain gratuity in the event of their again succeeding in ringing the beast, to which proposition they gladly acceded.

Our party now separated, the four peasants to encircle the bear, whilst Elg and myself, as we could be of no assistance, together with the dogs, faced for Sälje. The peasants divided, two of the number kept over the tracks of the animal, and the remainder below them, fixing upon a certain point to meet at nightfall, which was then not very far distant. Thus they were enabled to complete a ring in half the usual space of time.

At this period we were about nine or ten miles distant from Sälje; but though Elg and myself pushed on at our best pace, owing to the darkness of the night, and the badness of the ground, it was seven o'clock, or four hours after sunset, before we reached that place.

I had intended, as I have said, proceeding forthwith to Brunberg, that I might search for the bear Elg imagined he had ringed in the vicinity of that hamlet; but the ill success we had just met with put this notion out of my head for the present; for, independently of not caring to rouse another bear when there was so little snow upon the ground, it was necessary for us to see after the one we had already on foot. On the following morning, therefore, I got into my sledge, and headed back to Lapp Cottage. At this time it was snowing pretty fast, which made me rather apprehensive the tracks of the bear we had chased during the preceding day would be lost altogether. But before starting, I despatched Elg to the northward, that he might be in readiness to assist the peasants, should his services be required in ringing the beast; or, if the men should have succeeded in accomplishing that desirable object, he might see that the ring was secure. In the event of the track being altogether lost, however, I directed Elg to send an express forthwith to me at Lapp Cottage. In that case, we proposed beating the whole of the surrounding country, which would have given us a chance of retrieving the brute.

Three days afterwards there were fourteen degrees of cold at sunrise, and on the afternoon of the same day, two or three inches of snow fell. In the evening Elg and the Sälje peasants arrived at Lapp Cottage, bringing me the agreeable intelligence that they had succeeded in again ringing the bear: this was at no very considerable distance from where we had discontinued the pursuit of the animal. The people, it appeared, nearly encircled him on the evening of that day, when, bivouacking in the forest for the night, they completed the ring at an early hour on the following morning. It was very fortunate they succeeded in accomplishing their object thus early, for in the course of the same day there fell several inches of snow, and the tracks of the animal became in consequence altogether obliterated. They stated that the new ring was of a large size, it being six or seven miles in circumference. But it was necessary to make it of a considerable extent in the first instance for fear of again disturbing the bear; they had intended, however, materially to reduce its

size by cutting off angles, but from the snow which fell so immediately afterwards, obliterating his tracks, it became impossible to accomplish that operation.

The peasants having performed their part of the contract, I paid them the stipulated price, with which, and probably thinking they had much the best of the bargain, the bear being then at large in the forest, they returned well pleased to their homes. Though I had now reason to suppose that the beast was safely ringed, I thought it undesirable to attack him for some little while, for there was still very little snow in the forest thereabouts, and owing to his having been so recently disturbed, the chances of our being able to steal upon him whilst in his quarters were very slight. In the interim, therefore, we thought it best to proceed to Brunberg to search the ring in the vicinity of that place.

## CHAPTER XVI.

Bear-Shooting from a Gäll—Patience and Perseverance— Often very Disappointing—Trying Circumstance— Amusing Cases—Bear Hunting at Brunberg—The Search—Taking Care of the Guns—The Den—The Peasants Disconcerted—The Death—Skinned and cut up.

Two days afterwards, a little before we reached Brunberg, Elg pointed out to me, between three pines growing immediately near to each other, and at some twenty-five or thirty feet from the ground, a small stand, or gäll, as it is termed in Sweden. This he had erected himself, and from hence he had at different periods shot three large bears. His plan of proceeding, which was common throughout the northern forests, was the following. During the winter months he would deposit the carcase of a cow or horse immediately near to the gäll. When the bear, therefore, left his winter-quarters, and when, from the difficulty of procuring sustenance, in the early

part of the summer, he is roaming the forest in every direction in search of food, the smell of the carrion not unfrequently tempted him to the spot.

Elg visited this lure nearly daily, and when he found a bear had been feasting upon it, he lost no time in perching himself up in his gäll. As it is during the night-time, however, that these animals most commonly feed, he seldom got into his stand before the shades of evening were setting in. Here, unless the bear made his appearance previously, he remained in the most profound silence, and with all his eyes about him, until the sun was well above the horizon on the following morning. This silence and watchfulness, indeed, were very necessary, for Elg described the approach of these animals to the carrion to be in general so cautious that the slightest noise would have alarmed them. Soon after sunset. and a little before sunrise, he stated to be the time at which ' the bear most commonly made his appearance. In one instance, Elg neglected to look after his lure for some few days; of this the bears had fully benefited, for on his return he found they had devoured nearly the whole of it. particular season, therefore, as no other carrion was procurable, his sport was at an end.

Poor Elg sometimes suffered very much from the severity of the weather, when posted on his stand. On one occasion, from waiting for fourteen or fifteen successive nights, during which, though he heard the bear rustling among the bushes in the vicinity, he was never fortunate enough to see him, he caught so severe a cold upon his lungs that he was confined to his bed for the succeeding fortnight or three weeks. From the effect of this chill, indeed, he never, according to his own account, perfectly recovered.

One of the three bears that Elg shot, from the gäll of which I am speaking, fell dead at the instant he fired, but the other two ran for some little distance before life was extinct. The growl that one of the brutes gave on receiving his mortal wound he described to be most terrific; to use his own expression, it made the forest echo again.

On one occasion, Elg shot at, and unfortunately missed, an old she-bear with two cubs. This was from the night being

so dark that he was unable to take a proper aim, and in consequence they all went off unhurt, or only one of them, at least, was slightly wounded.

When a bear has killed a horse, or other large animal (for if it be a sheep or goat he generally devours it at once), a gäll is not unfrequently erected near to the spot for the purpose of destroying the beast. But in such cases the chances of success are very problematical; for though, if the part of the forest where the slaughter takes place be kept quiet, the bear will occasionally return to devour the remainder of his prey, such is not, I apprehend, generally the case; this originates, probably, from his entertaining suspicions that all is not right, and, in consequence, he exerts, in a greater degree than ordinary, the fine senses of hearing and smelling with which nature has endowed him.

On several different occasions, Elg erected a gall under the above circumstances, but in no instance did the bear again return to the carrion. He more than once, however, heard those animals rustling among the trees in the vicinity, but their fears, probably, got the better of the cravings of their stomach. In one instance Elg watched the carcase of a horse, that a bear had slaughtered, for a fortnight, and when his patience was exhausted, another peasant took his place in the gall for the like period of time, but all was unavailing, for the beast never again came back to his victim.

Mr. Falk makes mention of the gäll; I shall, therefore, transcribe what he says upon the subject:—"It often happens that the bear may be shot in the following manner. After he has killed an animal, a gäll is built between two trees, twelve feet from the ground near to the prey, in which two or three persons sitting can wait for him until he comes to make his repast. He generally makes his appearance the first or second afternoon at sunset, if the carcase is allowed to remain untouched, and all is silent. In winter, also, dead horses may with success be conveyed into the forest, and laid, covered with branches, in those places where the bears usually resort on leaving their dens. At this time the branches are removed from the carrion, and a gäll built, which is used as before described. The bear, after his long winter lethargy, is very

hungry, and searches for sustenance wherever it can be found, and therefore this artifice very often succeeds."

During the summer before last, an immense bear killed a cow at not very many miles distance from Lapp Cottage. On this I erected a gäll immediately near to the carcase. It simply consisted of a few boughs, so interwoven together that I could not well tumble out, and was situated between two pines, which grew pretty close to each other, at about twenty feet from the ground.

In this stand I posted myself for five successive nights; but to my mortification, the bear did not make his appearance. It was near midsummer, and I did not therefore suffer very much from the cold. To protect myself from that evil, besides, I always kept my boat-cloak up in the gäll. My great enemies were the mosquitoes, which, had it not been for the veil which I wore on these occasions, would have been very annoying. I was always quite alone, and generally armed only with one gun; but I did not, I apprehend, incur much risk, as I never heard of a bear making an attack upon a man under similar circumstances. On the contrary, indeed, the beast is always said to run if he be able the moment a shot be fired from the gäll.

I was in the habit of taking post in my gall, which was situated in the wilds of the forest, and at a considerable distance from any habitation, as the shades of evening were setting in. At that time I used to proceed with all imaginable silence and caution towards the carcase, which was shrouded in a densely thick brake, in the hopes that the bear might be feasting upon his victim, and that I might then be enabled to steal upon him. Had I come in contact with the fellow at these times, I should have had my own battle to fight. I trusted, however, to John Manton to get me out of the scrape.

There was something interesting in being perched up in my gäll. The gloomy solitude of the forest in the night season—the melancholy hootings of the horned owl, which were to be heard every now and then in the distance—the slaughtered cow lying in a small glade before me, mangled in a dreadful manner by the fangs of the bear; and lastly, the excitement kept up by momentarily expecting the rugged

monster himself to make his appearance. It is always desirable to erect a gäll very high up in the pines. In that case a bear cannot so well scent a person when posted in his stand. If it be in the height of summer, however, this is the less likely to happen, as the carrion often emits so noisome an odour, that the effluvia proceeding from a man must be little perceptible.

I have heard of several ridiculous anecdotes relating to shooting bears from a gäll. In one instance two persons were posted in their stand, when, after waiting awhile, the Bear made his appearance; but, just as they were in the act of firing, the gäll suddenly gave way, when, to their great discomfiture and consternation, they were both precipitated to the ground. On another occasion, two men were posted in their gäll. But when Bruin made his appearance, his grim looks so completely upset the nerves of these redoubted heroes, that they dared not to fire, and he in consequence went off unhurt.

To proceed with my narrative.—On reaching Brunberg, which was situated in the very wilds of the forest, I took up my quarters with a nephew of Elg's. Here, as I obtained a good room to myself, and had my bedding and other things along with me, I was far from being uncomfortably circumstanced.

On the succeeding morning, Elg and myself started in a sledge at the break of day, to look for his bear. This was ringed on the eastern face of a rather lofty mountain, four or five miles to the eastward of Brunberg. There were two peasants along with Elg when he encircled the animal, both of whom were to share equally with himself in the spoil, in the event of the beast being doomed to die. But as these resided at a considerable distance from Brunberg, Elg had, on the preceding evening, sent off an express to desire them to meet us in the morning at a given spot. On our reaching the place of rendezvous, however, the men had not made their appearance, and as the weather was stormy and comfortless, and some little snow was falling, we lost no time in getting up a good fire, by which, in some degree, we consoled ourselves for their absence.

Here an accident was nearly happening to Paijas, the only dog we had along with us. He was fastened to the back of

the sledge that had conveyed us from Brunberg, which was standing immediately near to us, when, from some cause or other, the horse, which was still attached to the vehicle, took fright, and was bolting off at the full gallop; but very fortunately I was at this moment in such a situation as to be enabled, by throwing myself upon the animal, to retard his career, and thus prevent mischief. Had the horse once fairly started, the dog must inevitably have either had his neck broken, or have been dashed to pieces among the trees. less than half an hour after we had got up a fire, we were joined by the peasants. We now despatched our sledge back to Brunberg; and when the people had rested themselves for a short time, we set off for the ring, which was then immediately near to us. The ring on this occasion was of an unusual size—not much less, certainly, than ten miles in circumference. It embraced, indeed, almost the whole of the eastern face of the mountain; but this, from circumstances, was unavoidable. The fact was, the day on which Elg and his companions started the bear (they being in the forest for the express purpose of looking for one of these animals), they took this immense circle around the beast, as well for the fear of coming too near upon and disturbing him anew, as that it was only in places there was a sufficiency of snow to enable them properly to effect their purpose. They had intended, however, at a subsequent period, materially to have reduced the size of the ring; but on the succeeding day a thaw came on, and in a very short time the ground, except in patches, was altogether bare of snow. In such weather, of course, they dared not to go near to that part of the forest, for had they then started the bear, they would probably have lost his tracks, and he in consequence would have made his escape.

Though this ring was so very extensive that it would have taken so small a party as ours two or three days to have searched it properly, yet from the knowledge the people possessed of the most likely brakes, they were of opinion that if the animal was within it, we should presently succeed in getting him on foot. In this, as the event proved, they were not altogether wide of the mark.

When Elg and his companions first started this bear, it was

out of an almost impenetrable brake, in the very thickest part of which he had formed a den, by excavating the ground to a very great depth. A lair of this kind is called in Sweden jord graf. Though the animal had intended this as his winterquarters, he had not taken possession of it at the time he was disturbed by the people; but he was lying on some few pine branches (gran qwistar), which he had torn from the adjacent trees. When the bear thus reposes in the immediate vicinity of his den, it is called in Sweden lying pabratt, or on the watch. It is asserted by many that the animal always adopts this course before he retires to his winter-quarters, that he may ascertain if the spot be secure and free from molestation. Possibly, however, it may arise from the temperature being mild when he first lies down, and that in consequence he requires less protection than at an after period, when the weather becomes more severe.

At the time Elg and his companions first roused this bear, they were not fortunate enough to get a view of him; though they were so near, that they distinctly heard the rustling of the boughs, as he made his way through the thicket. But as on this occasion their movements were conducted with great silence, and as they had no dog along with them, they seemed to be of opinion that the bear, from having been little alarmed, had not improbably gone back to this den, which he had prepared with so much care and labour; and this, in consequence, was the first point for us to reconnoitre.

At the time of our expedition, there was about four or five inches of snow upon the ground generally; but in particular parts of the forest, where much that had fallen in the early part of the winter was still remaining, it was very much deeper. There was but little in the trees however, which was owing to the boisterous state of the weather; the wind having either blown it down, or prevented it from making a lodgement. On this occasion I carried my double gun, and Elg my rifle. The better to protect the locks of the former, which were on the common principle, from the snow, I had, previously to starting in the morning, dropped a little melted tallow from a candle, on the junction of the pans with the barrels. By this means, with the assistance of the piece of

loose leather I was in the habit of carrying over my locks, my gun, for a single discharge, was rendered nearly water-proof. This was a common expedient of mine when I had an intention of attacking a bear. At such times, indeed, a missfire might cost a man his life, and it is therefore always desirable to adopt every possible precaution.

As I conceived that had not Paijas been loose when we recently attacked the bear near to Sälje, we should probably have come in upon the fellow before he was well awake, and thus have been spared the mortification of seeing him walk off his own master, I determined in this instance the dog should not be slipped from the leash until we had beaten some of the most likely parts of the ring, and I therefore directed the peasants to follow with him at some distance upon our track. Elg and myself, in the most profound silence, now faced for the brake, from whence himself and his companions had started the bear some weeks previously; but this was so excessively close that we could hardly force our way through it. We had not, however, proceeded very far when Elg pointed out to me, at some few paces distance, the entrance to the den, which, from being confined and enveloped with brushwood, was then hardly perceptible. To this, as may readily be imagined, I was not long in making my approaches, when, stationing myself immediately near to its entrance, I stood prepared to give the animal a warm reception in the event of his being within the lair and attempting to make his escape. But the beast was not within the den, for benefiting by the hint he had received, he had taken himself off to another part of the forest. The den was excavated on level ground, and nearly in a perpendicular direction. It was of an extraordinary depth, not less, certainly, Though its entrance was very narrow and than six feet. confined, the lower part of it, to judge by probing it with a long stick, was roomy and capacious.

The people were now not a little disconcerted, for they had fully anticipated that the beast would have found his way back to this lair. This however not being the case, there was nothing left for us but to search the other parts of the ring, which we therefore set about doing almost immediately.

Some little while afterwards we came to another thicket, which was so close and tangled that we had no little difficulty in forcing our way through it. At this time we were in line, and only a few paces apart from each other, Elg being to my left and one of the peasants to the right of me. Thus we slowly proceeded forward, keeping all the while the most guarded silence, and carefully examining everything of a suspicious nature that fell in our way.

At last I came to a small partial opening in the brake, when, at about fifteen paces ahead of me, though in the thickest of the cover bordering on the glade, a little rising or hillock for the moment attracted my attention. At this time I was rather too far removed from Elg, and as the peasant who was to my right was in the line for the suspicious object, without farther reconnoitering it I wheeled to my left, and again entered the thicket from which I had just emerged. But I had not taken more than a few steps when a low whistle (the preconcerted signal) from the peasant to the right of me, announced that he had come upon the beast, and it instantly flashed across my mind, which was the fact, that what I had just seen was his den. In some three or four seconds, therefore, I had retraced my steps to the little opening, when, at about ten or twelve paces distant, I saw the fellow as through a veil,—for he was deeply shrouded by the surrounding young pines, as he was rearing himself from his lair. The locks of my gun, which was loose in my hand, were at this time on the full-cock, and not caring to let the animal go off as the one at Sälje, I quickly took a rather snap-shot, and, as luck would have it, placed a ball from one of my barrels at the back of his ear, when he instantly sank down to rise no more. As he still, nevertheless, exhibited some small signs of life, I ran close in upon him, when, with my second barrel, I gave him the coup de grace by splitting his skull open with another ball. On hearing the shots the peasant, who was leading Paijas at some distance in the rear, slipped him from his couplings, when he quickly came up to the scene of action; but though the bear was quite dead, it was several minutes before the dog could muster courage enough, like a burnt child who dreads the fire, to lay hold of the animal.

We now dragged the beast from his lair, which was situated in an immense ant-hill (myr stack) in which he had buried almost the whole of his carcase. Here he had as comfortable a berth as could well be conceived, and here he might have set one hundred degrees of cold at defiance. In spite, however, of being thus snugly housed, and of the very guarded silence and caution with which we had proceeded, he had taken the alarm, and, as I have just shown, was on the point of bolting when I was lucky enough to shoot him. Our prize proved to be a he-bear, though not so large a one as I had been led to expect from the previous representation of the people. He was in very good condition.

All things considered, this little expedition ended rather fortunately, for had I been a second or two later, the beast would probably have been off from his lair, in the same manner as the one at Sälje, and, for the time at least, have escaped. Indeed, if Paijas had been at large, he would most likely have been in upon the bear long before we could have come up, in which case, from the extreme shyness of the animal, it is hardly probable we should have got a view of him upon that day. We now greatly regretted having sent home the sledge, for, had it waited an hour longer, we being less than that time in the ring, it might have conveyed the bear to Brunberg; we, however, instantly despatched one of the people for another of those vehicles.

As the greater part of the day was then before us, and as we thought it possible we might have hit upon the wrong bear, we thought it best to make a cast over the ring; but our search proved unsuccessful, and, indeed, we did not fall in with a single head of game of any sort or kind. Towards nightfall, therefore, we faced for Brunberg, where, on our arrival, we were glad to find the bear had preceded us by several hours. In the course of the evening the animal was skinned and cut up. At this operation nearly all the peasants in the vicinity of Brunberg, together with several Dalecarlians, who were on their way from their native province to Elfvedal, were present and assisted. Whilst this was going on the pot was on the fire, and a plentiful repast, composed principally of the blood, liver, and heart of the animal, was preparing. When the meal

was ready, the assembled party did ample justice to the viands that were set before them, all seeming to think our venison was most excellent. This was the first bear that had been killed in the vicinity of Brunberg for several years; and it may therefore be readily supposed that not a few cups were drained to the bottom, to commemorate the successful issue of the day's sport.

For the reasons I have already given, as I had not made any agreement to the contrary, this bear belonged to Elg and his companions. That being the case, I only took possession of the hams and fat of the animal.

## CHAPTER XVII.

Snow-Skates in Hunting—Their length and Weight—Difficult to manage on broken ground—Skill attained by practice
—Speed — Bivouacking in the Forest — Interesting description—A winter Bear-hunt—Condition of the Snow favourable—The Start—Hope deferred—A Fresh Start—The Chase—Running the Bear down—The Dogs—Hot work—A long run—The Death—Curious custom.

THE forest was at this time smothered with snow, the ground being covered with it to the depth of three to four feet. From this cause we were necessitated in hunting to make use of our skidor, or snow-skates. Snow-skates are, it is well-known, very commonly made use of, during the winter season, in the Northern parts of Europe: when a person is conversant with them, nothing can answer the required purpose better.

The form of the skidor, though materially the same, varies a little in different countries, or even in districts. In the parts of Scandinavia of which I now speak, the skida for the left foot was usually from nine to eleven, or even twelve feet in length; whilst that for the right seldom exceeded six or seven. This inequality of length was to enable a person to wheel about, in a manner which it is difficult to describe in writing, with greater facility; as well as that, when in broken or bad

ground, he might lean the whole of his weight, if necessary, upon the shorter skate, which was constructed of stouter The breadth of these skidor was between two and In parts of Lapland, Finland, and Norway, three inches. again, those skidor that I have seen were much broader than the above; and they were also of an equal length, which seldom exceeded six or seven feet. The foremost ends of all skidor are considerably turned up, to enable a person to avoid any little impediment with which he may happen to come in contact: they are fastened to the foot with withes, or with leathern straps, in so simple a manner, that a minute or less will suffice either to put them on or take them off: a pair may weigh from ten to fifteen pounds. The weight, however, is of less consequence, as it rarely happens that one is necessitated to carry them.

In Wermeland and the adjacent parts, the skida for the left foot was always constructed of fir; that for the right, which was the shorter and stouter, of some tougher wood. In very mountainous districts, the under part of the skidor is sometimes covered, either wholly or in part, with sealskin. This, in a great degree, prevents a person from making a retrograde movement when ascending a steep acclivity.

In running, as it is termed, upon skidor, unless the snow is in an unfavourable state, they are never lifted from the ground; the motion is of a gliding nature, and, excepting as regards rapidity, something similar to that of the skate in common use with us in England. In some instances, a person carries a single staff in his hand; in others, one in each hand. These serve to impel him forward, and also to retard his progress, which he effects by pressing the stick upon the snow when too rapidly descending a declivity. To use snow-skates where the ground is pretty level and free from obstructions is not a very difficult acquirement; but to run upon them with facility in a deeply-wooded and mountainous country, thickly studded with fragments of rock and prostrate trees, of the nature, in short, of the Dalecarlian and Wermeland forests, requires immense practice.

When, in my noviciate, I not unfrequently received one or two hundred tumbles in the course of the day; sometimes, besides, I came with such violence against the trees, that I used to think I should be dashed to pieces, or that they would be uprooted; but by dint of continued practice, the fatigue at first being excessive, I at last managed to get along moderately well. When I first saw skidor brought into real play, though this, it is true, was by people who were among the first runners in Scandinavia, I was astonished and delighted with the skill and address with which these apparently unwieldy machines were managed. It was on the descent of a lofty and precipitous hill, and when the men were going at a great pace. At times they were stooping nearly double to avoid the overhanging branches; at others, they were swerving their bodies to the one side to save their guns, which were slung across their shoulders, from being injured by the trees; and at almost every instant they were shifting their legs, so as to give their skidor such a direction as would enable them to avoid roots, stones, and other impediments. From the length of the skider, one might suppose a person would be continually breaking them. This, it is true, does occasionally happen. particularly to people when they are in their noviciate; the same pair, however, often lasts a man several years.

I have heard and read much of the wonderful rate at which a man may proceed upon skidor; but I think not a little misapprehension exists on that subject. It is true, if the ground be falling, and the snow in good order, he may go at almost any pace he pleases; but then it must be taken into consideration that he has hills to contend with, and that, if these be at all precipitous, he is often obliged to proceed in a zig-zag direction; much time is therefore necessarily lost before he can surmount them. Almost everything depends upon the state of the snow and the nature of the country. If the former be sufficiently hard to bear, or even partially to support the skidor, and the latter flat, or only gently undulated, and pretty clear of obstructions, a good runner may certainly for a while accomplish six or seven miles within the hour; or should it be only for a short distance, perhaps very considerably more. If, on the contrary, the snow should be loose, which is most frequently the case in the Northern forests, and the skidor in consequence sink deep into it, and that the country be mountainous, thickly wooded, and full of rocks, dead timber, and other impediments, a person's pace is a most sorry one.

With every advantage, a man on skidor does not usually proceed at a much greater rate than a fast walker. incompetent to hazard an opinion as to the distance, supposing the snow to be in good order, the line of country favourable, that a man might run in the course of a day upon skidor. But as the feet and ankles rarely suffer much inconvenience from the use of these implements, and as the lungs are not brought much into play, I should imagine fully more might be accomplished than by a person on foot. I never in my best days was a good pedestrian—so little of one indeed, that, let the emergency have been ever so great, I much doubt whether by walking or running I could have got over fifty miles in less than thirteen or fourteen successive hours. I think, however, that on skidor, supposing I had any particular object in view, I could perform that distance in considerably less time. When I come, therefore, to contrast my own pedestrian performances with those of others, I can readily imagine that men may be found who could perform fifty miles in seven or eight hours, and not impossibly a hundred in double that space of time. As I have never made use of the American snow-shoes, it would be idle of me to make a comparison between them and the snow-skate common to the North of Europe.

As a substitute for skidor, when the snow was deep, the peasants usually provided themselves, when in the forest, with skarbogar. These are frames of wickerwork, of a roundish, or rather oval shape, about fifteen inches in length, and twelve in breadth; but, independently of their very insufficiently answering the purpose for which they are required, owing to their very imperfect construction, they are continually liable to get out of order. But skarbogar are possessed of this advantage, that they are easily made, and as easily repaired. I have occasionally seen horses provided with skarbogar in Dalecarlia. These consist of circular iron rings, of about ten or twelve inches in diameter, across which are several transverse bars of the same metal; they are fastened to the fetlock with leathern or other thongs; thus equipped,

those animals necessarily straddle a little in their gait; but they are then enabled to traverse the forest in all directions, let the snow be ever so deep.

Shortly after the incidents related in the previous chapters, intelligence was brought to me at Lapp Cottage that a large bear (all these animals being monsters in regard to size in the estimation of the peasants) was safely ringed at Aspberg, a Finnish settlement at about ninety miles to the north-west of my quarters. On the afternoon of the following day we set out for that place, and after several delays arrived there on the evening of the fourth day. On our way we had to bivouac one of the nights in the forest, and, as this is a very different thing from camping out in summer, the incident may be given in full.

In the summer-time our fire for this purpose commonly consisted of only a few dried billets, which, as the weather at that season is usually mild, and the nights short, answered every necessary purpose; but now that the temperature was severe, and the nights long, this description of fire would not have been sufficient to have protected us from the cold, unless it had been continually replenished and looked after. If our party had been large this might easily have been arranged by taking it in turns to keep watch; but as the contrary was the case, and as we were fatigued after the exertions we had gone through during the day, this would not have been a light task. We adopted another plan, therefore, common in that part of Scandinavia, which in every respect answered the purpose infinitely better.

In the first place we looked out for a situation sheltered from the wind. We then sought for a moderately sized tree, that had so far undergone the process of decay as to be perfectly dry. It was necessary, nevertheless, that the trunk should be quite sound, which was easily ascertained by striking it with the back of an axe; as, had it been rotten, it would have been consumed too rapidly. A green tree would not have answered the required purpose, as it would never have ignited properly. It was necessary, also, that the tree should be a Scotch fir (tall) pinus sylvestris, as the spruce (gran), pinus abies, burns very indifferently. When we had met

with such a tree as answered our purpose, which was after the lapse of a few minutes, there being abundance that are suitable in the Northern forests, one or more of the people quickly levelled it with the ground. As it was in the act of falling, however, we took care to give it such a direction as was most suitable for our bivouac.

We now chopped a log of about eight or ten feet in length from the thicker end of the tree; this we then laid longitudinally along the latter; but by means of two pieces of wood, of about the thickness of a man's arm, placed transversely, we kept them a little apart from each other; prior to elevating the log on to the prostrate tree, we jagged the edge of either of them that were to come in contact, that they might The uppermost log was without support; ignite the better. to prevent it, therefore, from falling during the night, which might have been attended with very awkward results, a small pine, with its thinner end resting on the ground, was placed across it, at about an angle of forty-five; the weight of this kept all steady, and guarded against the possibility of accident. To make assurance doubly sure, indeed, we sometimes fastened this tree, or stay, as a sailor would call it, in its proper position with a wooden pin. Whilst this was going on one or more of the party was occupied in removing and trampling down the snow on either side of the logs; and in strewing the space thus in a manner cleared with an abundance of pine branches. they placed others of these at the back of our bivouac, which served as well for pillows as to protect us, in some degree, from the wind and weather.

Bundles of lighted sticks were now introduced between the logs, a space of two or three inches, as I have remarked, having been left for that purpose, so that in the course of a short time we had a most comfortable fire. Our knapsacks were now put in requisition; and as our rifles had produced us, on our way to the ring, a bird or two, we were enabled, though with very rude cookery, to enjoy a comfortable repast. On this, as on many similar occasions, I had a small coffee-pot along with me. I used to think a cup of that delicious beverage a greater luxury after exercise than the finest viands. When our meal was finished pipes were produced, and, as by

this time the people were in some degree recovered from their fatigues, the laugh, the joke, the song, and the brandy bottle went round. After the lapse of an hour or two, when our drowsy eyelids told us it was bed-time, we reclined on our couch, and resigned ourselves into the arms of Morpheus.

When I first visited Scandinavia, I sometimes carried a light blanket when on any little expedition into the forest; but, from finding this a great encumbrance, and that I could manage very well without it, I subsequently seldom took it along with me. On this particular occasion I little needed it, as the weather was moderate, the quicksilver being only four or five degrees below zero.

The night was very fine, and the stars shone with great brilliancy. In the northern parts of Scandinavia, indeed, those luminaries and the moon oftentimes shine with so much lustre, that, together with the reflection from the snow, a person is enabled, even in the depth of winter, to read the smallest print at midnight.

Though it took us about an hour to prepare our quarters. when once completed all trouble was at an end; for, instead of having to watch and replenish the fire continually, as would have been the case if it had been got up in the common manner, from the thickness of the logs and the consequent slow action of the fire, the wood continued burning, and even throwing out a great additional degree of heat during the whole of the night. This was not the only advantage, for owing to the fire being a little elevated from the ground, an equal degree of warmth was distributed over the whole body. This plan of bivouacking was the most admirable I ever saw, for if the situation was sheltered, a person seldom suffers to any very serious extent from the cold. I speak this from some experience, as at different times I have lain in the forest when the temperature has been rather severe. Wind, or a snow-storm, are the evils to be dreaded, for in such cases a person can only partially protect himself from the effects of either one or the other.

After being very warm, I have felt the cold to some extent when I have thus had to quarter on the snow. I remember once I was so much heated after a severe chase, that when

we got up a fire soon after dark, my clothes were nearly as wet as if I had been in a pond—so much so, indeed, that, in unbuttoning my coat, the back part of it immediately froze into a sheet of ice. The quicksilver was then twentytwo degrees below zero, or fifty-four beneath the point of congelation. I had, however, no other canopy for the night than the starry vault of heaven, and no other covering than my usual clothes. Though such a watch-fire as I have been describing is got ready in less than an hour, if there be plenty of assistance; should there be only one person to prepare it, as was sometimes the case, when I have been accompanied only by Elg, the operation usually occupied two hours or more. The size of the tree depends upon the state of the weather and the length of the night; if the temperature be severe, and the night long, a thicker tree is of course required than if the contrary be the case. But let the pine be of what dimensions it may, a Northern forester soon levels it with the ground. The address with which these men use their axes is very Indeed, Elg assured me he once felled forty-eight timber trees in the course of a short autumnal day. pines in Scandinavia are usually hewn at about two feet from the ground.

On arriving at Aspberg, the weather being delightfully fine, we set out on our skidor to attack the bear, of which we had come so far in pursuit. This was ringed at the foot of a range of rather lofty hills, situated to the south-east. There were four of us on this occasion—Elg and myself, and the two peasants who had accompanied us to that place on the preceding evening. Neither of the latter, by my desire, were armed with anything besides their axes. We took Paijas along with us.

In all this part of the country, the ground was covered with snow to the depth of about four feet. A great part of this had fallen in the early part of the winter. From having been so long upon the ground, it had attained a much greater degree of consistency than was the case farther to the southward, and in consequence was in very tolerable order for our skidor. In point of fact, indeed, instead of the latter being buried for a foot or more in the snow, at almost every step we took, as was

generally the case lately, they now only sank a very few inches below its surface. Though the snow was in a rather favourable state as regarded ourselves, its surface had not obtained that compactness to support the weight of such an animal as the bear. For this reason we thought it probable that were we to succeed in rousing the beast, even though we were not fortunate enough to destroy him in his den, we might eventually be able to come up with him by means of our dog and skidor. As we were careless, nevertheless, of throwing away a chance when we reached the ring, which was of no very considerable extent, we thought it best, in the first instance, to search it in our usual silent manner. We thus hoped to be enabled to steal upon the bear before he had the opportunity of leaving his winter quarters.

Owing to the depth of the snow, which made us apprehensive of passing over the animal, we on this occasion so far deviated from our common plan, as to slip Paijas from his couplings. We were the less apprehensive of adopting this step, as we were very certain the dog would not range far ahead, for the reasons I have already given. We besides entertained great hopes that even if he should be the first to come upon the bear, the beast would not leave the den until we had time to get up to the spot. This was more likely to be the case from the quantity of snow that was then upon the ground, as at such times these animals usually lie much closer than at others.

I now ordered Elg to keep at four or five paces to my right, and the peasants to follow in our tracks. Thus, for several hours we beat the most tangled brakes within the ring; but we could not succeed in meeting with the object of our search. At between twelve and one o'clock, therefore, we halted, when, spreading the contents of our kit upon the ground, we regaled ourselves upon such homely viands as it contained, and these we enjoyed with the greater relish, from our walk having given us a good appetite. Here we rested for about an hour and a half, and then resumed the search in the same manner as before.

Nearly up to this period the snow had been in very tolerable order for our skidor; but from the day being rather mild and

bright, such parts of its surface as were exposed to the rays of the sun had now become partially thawed, and, in consequence, fastened in such masses upon those implements, that we could no longer move with anything like facility. Instead, therefore, of the gliding kind of movement with which the action of the skidor is usually accompanied, we were now obliged, either wholly or partially, to lift them from the ground at almost every step. In addition to this, we were necessitated to strike them continually with the sticks we carried in our hands, that the sudden jar might shake off the snow that was adhering to them. This being the case, we should have acted wisely if we had given up all farther search for that day, for unless we were fortunate enough to kill the bear in his den, there was little or no chance, if he was once on foot, of our being able to come up with him. As, however, we had at this time gone over near two-thirds of the ring, we began to be apprehensive that the animal might not be within it. ascertain that point, therefore, we determined to beat out the remainder. But our fears on this head were groundless, for scarcely a quarter of an hour had elapsed after we had finished our repast, and when we were in a very thick brake, before Paijas began to challenge. He was a little in the rear of us, the softness of the snow hardly permitting him to get along; but he soon pushed rapidly ahead. My gun was at this time loose in my hand, and as I knew it was the bear the dog had scent of, I lost not a moment in following upon his track; but I had not taken more than a few steps, when I saw the game of which we were in quest bolt from his lair, at about fifteen paces ahead of me. I had, however, the merest glimpse possible, so that before I had time to fire, he was out of my sight.

This was an unfortunate finale, for, had the bear lain still for one or two seconds longer, I have little doubt I should have put an end to him; indeed, had not Paijas been loose—it being his baying that disturbed the beast—I must have come right in upon his den; this could hardly fail to happen, as he was lying in the very track I was pursuing, in a well, as it were—the surrounding snow being upwards of four feet in depth. As there was no help for this mishap, we lost no time

in giving chase; but the snow clinging to our skidor in the manner I have described, we were only enabled to plough our way through it with great labour and difficulty.

Had we been divested of our skates at this time, we should have sunk through the snow to the ground at every step; but this was not the case with the bear, as, from the broad spread of his feet, he managed to tread so lightly that he seldom penetrated more than twelve or fifteen inches beneath its surface, which was nothing to so powerful an animal as that of which we were in pursuit. The beast, however, did not proceed for any distance in a gallop, but shuffled forward at a long trot. Under these adverse circumstances the chase proved an unsuccessful one. This being the case, it would be little interesting were I minutely to detail the particulars; suffice it therefore to say that in a very short time we overtook Paijas, who was our only hope, for by hearing his challenge in the distance we were enabled to make many a short cut; and that after a run of about two hours, by which time we were dead beat with the fatigue of thus wading through the snow, finding farther pursuit useless, we came to a halt.

Tired and dispirited, we now retraced our steps to Aspberg, from which we were fortunately at no great distance, owing to the bear, towards the conclusion of the chase, having made a cast in the direction of that hamlet. Before starting in the morning I agreed to give a few rix-dollars for all right and title to the bear, whether we killed him or not, in the event of his being within the ring. The laugh was therefore fairly against me; the beast was at large in the forest, with a very fair chance of escaping altogether, whilst my money was safe in the pocket of the peasant.

On the afternoon of the succeeding day, which was beautifully fine, I sent Elg to see after our bear. He returned in the course of two or three hours with intelligence that he had succeeded in again ringing the animal at no very considerable distance from where we had left off the pursuit on the preceding evening; this was on the eastern face of a range of rather lofty hills lying to the eastward of Aspberg. I was pleased with this information, as I was apprehensive the beast might have betaken himself to a distant part of the country. At

five o'clock, therefore, on the succeeding morning, the weather being fine and slightly frosty, Elg and myself set off for the new ring. On this occasion we took one of the peasants who had accompanied us previously along with us, that he might carry a kit of provisions and an axe, as it was uncertain where we might have to quarter during the ensuing night. The snow was now in very tolerable order for our skidor. We had not, however, proceeded more than a thousand paces from Aspberg when we fell in with the fresh tracks of our bear, which had evidently been on foot during the preceding night; these crossed the route we were pursuing, and led off in a westerly direction. This was an untoward and unlooked for circumstance; but it must have arisen from Elg having approached too near to the beast whilst he was in the act of making the ring, and thus disturbed him anew, or that the animal was dissatisfied with his quarters, and in consequence had gone in search of others.

We now lost no time in giving chase, or rather in following up the tracks of the bear; we pursued these for full an hour and a half, and until we had reached nearly the summit of the range of hills lying to the south-westward of Aspberg; here we came to a thick and tangled brake, where from certain indications, such as his doubling, or, in other words, proceeding in a crooked direction, we had reason to suppose the animal had taken up his quarters. Had we thought there was the least possible chance of the attempt proving successful, we should now have endeavoured to steal upon the bear, but' from his having been so recently disturbed we were well convinced he was far too much on his guard to allow of our approach. We deemed it best, therefore, to slip Paijas from his couplings, and with his assistance try to run the beast down on our skates; the dog now dashing into the thicket, presently gave us to understand by his challenge that the animal was on foot and making his way to another part of the forest.

Though the snow, as I have said, was now in very tolerable order for our skidor, and we in consequence were enabled to push forward at a rather rapid pace, it was in too loose a state for the bear to proceed generally at the gallop; as on the

Saturday, indeed, he could only scramble forward at a trot. Had Paijas, therefore, been able to keep up with him for any length of time, by hearing his challenges in the distance, and, in consequence, avoiding the very many sinuosities taken by the beast, we should, probably, soon have been enabled to cut in upon him. This, unfortunately, was far from being the case, for the gallant dog, whom two winters before I saw worry a bear for nearly eight successive hours, in which time he must have driven the animal over nearly thirty miles of country, was now so worn out, that in less than a quarter of an hour we not only overtook him, but left him very far in the background.

We now greatly regretted the absence of Hector. Though this dog was very inferior to Paijas in his better days, yet from being light and active, and, in consequence, from not sinking much below the surface of the snow, I have little doubt that he would soon have enabled us to kill the bear. But it was no use lamenting his absence, as that little tended to help the matter. Though we were, as I may say, without a dog, we still thought that, by persevering, we might eventually tire out the bear, and thus at last fairly run him down; we, therefore, continued to push on after his track at the very top of our speed. Had the animal now taken to an open line of forest, I daresay that, from the state of the snow, we might quickly have been up with him, but so far from this, he held to the thickest brakes he could meet with, and to the most broken and precipitous ground, and from these causes our course was naturally much impeded.

Thus we continued the pursuit for between two or three hours; but we never even succeeded in getting a view of the bear. He made many doubles during this time, and at last returned nearly to the point whence we had started him. We were now joined by an active young fellow named Olof Andersson, a Norwegian by birth, though a resident at Aspberg. This man, who was a capital runner upon skidor, had heard the challenges of Paijas, and knowing previously what was going forward, he now came to be a spectator of the chase.

At this period we began to think it very problematical

whether, without other assistance, we should succeed in coming up with the bear; I therefore ordered a halt, and dispatched our new associate to Aspberg, from which we were then only a few miles distance, to obtain a likely looking, though untried, dog that I had seen at that hamlet on the preceding day. As some time must necessarily elapse before Olof could possibly return to us we got up a good fire; this guarded us against getting chilled, as well as enabled us to dry our clothes. Mine, indeed, owing to the severe exercise we had taken, were as wet as if I had been pumped upon for half an hour. We now did ample justice to the contents of our knapsack, the run having tended not a little to give us an appetite for our breakfast.

About eleven o'clock Olof rejoined us at our bivouac. He brought with him not only the dog, who was called Passopp, but the animal's master. This was another able bodied young man, named Henrik; he, like Olof, resided at Aspberg, and was a first-rate runner upon skidor. After taking a dram, as an earnest of better success, we resumed our skates, of which we had divested ourselves whilst remaining before our watchfire, and recommenced the pursuit of the bear.

I now directed Olof and Henrik, neither of whom were armed with guns, to follow upon the track of the beast at the very top of their speed, and, at the same time, to halloo continually. In the event, therefore, of their dog not challenging regularly to the bear, I anticipated that, by hearing their shouts in the distance, Elg and myself might be enabled to save many an angle, which would give us a very good chance of heading and coming in upon the animal. Thus I made the people perform the duty of hounds.

In this manner we proceeded for an hour or more. At last we came to an extensive and tangled brake—an old svedge-fall, in fact, where the young trees had grown up so thick that it was difficult to penetrate it. At this time Elg and myself were on the opposite or eastern side of the thicket to that of the people. Passopp now began to challenge loudly in the brake, Paijas being far in the background; but, from being unacquainted with the dog, we were at first a little in doubt as to what it might be with which he had come in

contact. This uncertainty was soon at an end, for the tremendous cries of the men, who were presently up to the spot. plainly told us it was the bear he had fallen in with. As the thicket was of great extent, and in places almost impenetrable, at least to people hampered with skidor, we thought the chances of getting in upon the animal in such a situation were much against us; instead, therefore, of making the attempt, we ran and posted ourselves at the northern extremity of the brake, as, from the course the bear had previously taken, we thought it probable he would make his exit at this point.

This was a most unfortunate cast, for, instead of facing us as we had anticipated, he headed directly about, and made off to the southward. In his progress he passed very near to a small glade in the forest where he had previously been standing, and where, if we had remained, I might very probably have succeeded in geting a shot. We were now thrown out altogether, which we presently knew from the challenges of the dog in the distance; nothing of course, therefore, remained for us but to follow in the direction the bear had taken as fast as we were able. The ground happening to be pretty favourable, by pushing on at the top of our speed we were enabled to rejoin the people in less than a quarter of an hour. These were now open mouthed; they stated that they came close in upon the bear, whom they described as an immense fellow, when he was in the thicket. One of them, indeed, Olof, was frightened almost out of his senses. The beast, as he asserted, made a dash at him, and he, in consequence, not only bawled out most lustily for assistance, but made an attempt, skidor and all, to climb up into a tree for safety. This little adventure was a standing joke against the poor fellow for a long while afterwards.

The bear, as we saw by his tracks (for Passopp, being good for little or nothing, had, by this time, come to heel), continued to make to the southward. Thinking it not improbable, therefore, that he would face for the lower ground, Elg and myself ran down the slope of the hill for the purpose of intercepting him: but we ordered the peasants to follow, as heretofore, upon his tracks. This proved another unfortunate

cast; for, instead of taking to the eastward, as we apprehended would have been the case, the animal made for the upper part of the mountain, and we, in consequence, were once more distanced.

To retrieve our lost ground we had now to contend against a considerable acclivity, as well as to fight our way through a close and tangled brake. By the time we had overcome these impediments the chasse, as we heard by the cries of the people, was far ahead, or rather to the right of us. Very fortunately, however, the bear, whose course had hitherto been to the south-west, shortly afterwards made a swing to the eastward: this enabled us to save an immense angle, and rapidly to gain upon the beast. But we were a few seconds too late to do execution, though in time to witness a very animating scene. On our rising to the brow of the hill we viewed the bear at about one hundred and fifty paces distance, just as he had bolted out of a brake to the right of us; when, striking into a beaten path that happened to be in the forest, and closely followed by the dog and the people, who, with tremendous shouts, were driving him forward, in the most gallant style he went down the eastern face of the hill at full gallop. I did not fire at the animal on this occasion, as, from the distance and the intervening trees, I thought it would be useless.

As Elg and myself had thus, in two instances, been thrown out, from holding to the lower ground, we determined from henceforth to keep, if possible, over the bear. Letting the people therefore follow upon his tracks,—for, plunging into a thicket, he was again quickly lost sight of, and the dog had also come to heel,—we made the best of our way along the brow of the hill. Some little time afterwards, and in a close brake below us, Passopp, and subsequently Paijas (for, owing to the serpentine course the bear had taken, the old dog had been enabled to come up), gave us to understand by their challenges they were again in with the bear. We now lost no time in taking up a position immediately near to the brake: here I thought I must have got a shot, as the people were driving the beast in the direction we were standing; but I was once more disappointed, for he headed about, and

passing between the men and ourselves, again faced up the hill-side.

From the swing the bear had now taken Elg and myself were the foremost of the party, and we therefore for a while pushed on after his tracks at the top of our speed. But having headed the dogs, who, indeed, fell back soon after the bear had left the brake, we thought it best to halt, as well that our companions might come up, which they did a few minutes afterwards, as that we might determine on our future proceedings.

We were all of us, by this time, pretty well knocked up, and one of the people was so hoarse from hallooing that he could hardly articulate a word. I had, fortunately, a little brandy left in my flask, and this did wonders; for, by the time we had taken a dram a-piece, we began to talk as big as ever, and still to threaten to deprive the bear of his skin before nightfall. The chances, however, were much against this result taking place, and that I well knew; but as, unless people think they can do a thing they seldom more than half attempt it, I encouraged them in their notion; I besides promised to reward them liberally if they exerted themselves to the utmost. After the lapse of four or five minutes we therefore again set forward, but, as I then thought, on a very forlorn hope. As I had been so often thrown out, I now determined to pursue the tracks of the bear, for all my attempts to intercept him had hitherto proved unavailing. For a while the animal kept, as we saw by his tracks, the brow of the mountain; but subsequently he faced directly down its eastern side, as if with the intention of making for the range of hills to the eastward, whence we had dislodged him on the Saturday.

The ground was here pretty clear of underwood; and we were enabled to dash down the declivity at a most tremendous pace—such a one, indeed, as the bear could not stand against; for, just before we reached the bottom of the mountain, we had the gratification to view the beast making his way through a little glade at about one hundred and thirty paces below us. I now discharged my rifle at the animal, though, as far as I was able to judge, without effect, and immediately afterwards

my double gun, which Elg had hitherto carried in a leathern case slung across his shoulder, and which he now put into my hand; I fired both barrels of this almost as instantaneously as I could pull the triggers, and, as luck would have it—for, to tell the truth, there was no great aim in the matter,—with much better success, for one of my balls hit the beast, as we subsequently found, in the neck. The animal was now evidently much wounded, as we could see by the manner in which he dragged himself along. Indeed, though the distance was so considerable, we could observe his track to be deeply marked with blood.

The dogs previously to this were in our rear; but on hearing the shots, they pushed forward to attack the bear, who, after proceeding about fifty paces, halted in a small, though rather close brake. Whilst in this situation, after reloading, I ran close alongside of him, when I put an end to his miseries by sending a ball through his head. Though I was immediately near to the beast when I fired—and he was still on his legs—he did not turn upon me, or offer the least resistance; indeed, he seemed to be stupified from the effect of his wound. On the people coming up, we overhauled our prize, which proved to be a large male bear; but either owing to age, or some other cause, he was as thin as a whipping-post, and had not an ounce of fat about him.

It was about four o'clock in the afternoon when the bear breathed his last, and as we had started from Aspberg at five in the morning, we had been on foot for eleven hours, or rather for nine, as we spent the remaining two before our watch-fire. In that while we had generally been running at our best pace, and therefore must have gone over very many miles of ground. Though the day was very bright and rather mild, our skidor fortunately ran well during the whole of it. This was owing to the bear confining his movements to the eastern face of the mountain, which was sheltered from the sun. Had he taken to the western side of the hills, or to other parts exposed to its rays, the snow would have adhered to those implements, and in consequence we should have had little chance of coming up with the beast. It was now too late in the day, and we were all too much tired to think of getting the bear to

Aspberg that evening. Leaving him, therefore, where he had fallen, we slowly wended our way to that place, whence we were only a few miles distance, where we arrived soon after the sun had sunk below the horizon.

On the following morning, at an early hour, the people conveyed the bear from the forest, with the assistance of a horse and sledge. He was then skinned and cut up in the usual During this process, we were favoured with the company of nearly the whole of the population of the hamlet, who were pleased enough that we had ridded the vicinity of so unwelcome a neighbour. I now witnessed a rather curious operation. When depriving the beast of his skin, two small portions of it were allowed to remain attached to the carcase one to the foot of the hind-leg, and the other to the haunch. The young dog Passop, that had accompanied us on the preceding day, was then thrust headlong through the aperture formed by the carcase and the loose skin. This manœuvre, which was repeated three times, was for the purpose of entering him to a bear, it being the first of those animals with This idle custom, for which he had ever come in contact. which I could hear no reason assigned, is common among the Finnish chasseurs in the Wermeland forests.

## CHAPTER XVIII.

Bear-Hunting Still—Close Quarters—A Smart Run—The Death—Two more Bears Ringed—A Fortnight's Chase—All in vain—Escape of the Bear—Another Bear Chased for a Week—Very Warm Work—Not successful—Remarks on Bear-Hunting—First-rate Dogs invaluable—Bears taking to a Tree—Different Modes of Attacking Bears—Interesting Incidents.

A FEW days afterwards Elg and myself started from that place for the purpose of beating the eastern face of the range of hills where we had slaughtered the bear a few days previously; here the cover was in places remarkably thick and good, and, from some intelligence we had received, we thought it not improbable that one of those animals might be lying thereabouts. On this occasion we took Olof and Henrik along with us, the latter being of course followed by his dog Passopp.

There had been a snow-storm during the preceding night, which continued at intervals during the whole of the day, and in consequence there was a good deal of snow in the trees. As there were a few degrees of frost, and the day was dark and windy, our skidor ran very well. On this, as on similar occasions, we formed a line, and beat the forest before us in the usual manner. Thus we proceeded for several hours without meeting with the bear of which we were in search, but we found a den where one of these animals had passed the winter months a year or two previously.

About one o'clock, however, at which time it was snowing very fast, Passopp, who might be near a hundred paces ahead of us, began to challenge in a tangled but rather low brake. Though from the intervening trees I could not at this time see the dog, yet from his manner, his remaining stationary, and the little probability there was that he had met with birds or other game in such a situation, I more than suspected he had fallen in with the bear. I now lost no time in shaking my double gun out of its case, where, for my greater convenience, I had hitherto carried it, and of pushing at my best pace towards Passopp. The spot where he was challenging was a small opening in the thicket; but there was nothing to be seen excepting a little aperture of less than a foot in diameter in the surface of the snow which was perfectly level, and near to which he stood furiously baying. course instantly knew to be Bruin's lair, and I was also very certain, from the manner of the dogs, for Paijas had now come up, that he was within it. Not caring to waste time, therefore, and having confidence in my gun, which was loose in my hand, I at once ran my skidor, one on each side of the hole. On looking down this pit—the snow on every side being nearer five than four feet in depth-I espied the bear very snugly coiled up at the bottom. By this time the animal had partly awakened from his nap, which had probably been of many months' continuance, and was beginning to move his head about, as if at a loss to know what was going forward. I now pointed my gun downwards between my legs, it being then in a perpendicular direction, and pulled the trigger; but instead of splitting his skull, as I fully anticipated would have been the case, the piece, as ill-luck would have it, missed fire. This must either have been owing to the snow that was coming down, or the powder falling from the pan, in consequence of the position in which I stood. In another moment I drew the other trigger, though, unfortunately, with as little success, for my second, like my first barrel, also refused to perform its duty.

The bear had by this time roused himself, and was just springing from his lair, when Elg, who had followed closely in my rear, put my rifle, ready cocked, into my hand; this I as instantly discharged at the animal, and though the muzzle of it was within less than a foot of his head, strange to say I managed to miss him altogether. I suppose most people will imagine this arose from trepidation, but, according to my own notion, it was from shooting in too great a hurry—I had no time, indeed, to take aim; my ball, however, I apprehend, all but grazed his skull, the point at which it was directed.

The bear now bolted from between my legs and reached the surface of the snow, and in consequence we were, as the old saying goes, "cheek by jowl" with each other. Here, as he stood grinning, I drove the muzzle of my rifle with considerable force under his ear, the point exposed to me, by which I partly succeeded in upsetting him. This foolish act arose rather from a feeling of ill-nature and disappointment at my having so stupidly allowed him to escape than from entertaining any apprehension of his attacking me, which he looked well inclined to do. Very fortunately, the beast only resented this assault by seizing hold of the barrel of my rifle, for, after indenting this with his teeth, at about a foot from the muzzle, he thought it the wisest plan to walk himself off.

Fortunately for me, this bear was not large; had the contrary been the case, for the old ones are always the most savage, it is more than probable he would have given me a broken head. Escape at the time was impossible, and both

Elg and myself were entirely unarmed after I had discharged my rifle. It is true one of our peasants was provided with an axe, but this man was far in the back-ground, and it is besides more than doubtful whether he would have ventured to have rendered us assistance in the event of its turning out a serious affair.

I now reloaded my rifle, but the locks of my double gun being filled with the falling snow, I had no leisure to put it in order. Letting it remain in statu quo, therefore, we forthwith gave chase. During the little delay that necessarily took place whilst the above operation was going on the bear seemed to have made good use of his legs, as, to judge by the challenges of the dogs, who kept pretty well up with him, he had by this time got some distance ahead. Fortunately the snow was in good order for our skidor, and we were therefore enabled to proceed at a good pace. For a while, we had to contend against rising ground, and to force our way through a large and densely thick brake; but, when we had surmounted those difficulties, we pushed quickly forward, and gained rapidly upon the bear.

The run might now have lasted for near three-quarters of an hour, during which the animal had proceeded in almost a direct line from the point where he had started; when, on reaching an eminence, we had the gratification of viewing him at about two hundred and fifty paces ahead: at this time he was galloping slowly forward, though occasionally stopping, as if his attention was taken up with the dogs that were following a little in his rear. We now dashed after the bear at the very top of our speed. The forest hereabouts was fortunately open, and the ground falling, and of course very favourable for our skidor; so that, from going at a killing pace, a very short time sufficed to bring us within sixty or seventy paces of the animal. We then halted, when, taking my rifle from Elg, who had it loose in his hand, I discharged it at the beast. He was still in the gallop, and rather crossing me; but my ball took the desired effect, for, entering one side of his neck, it passed out at the other, when he sank down and instantly expired.

· Both Elg and myself were a little surprised at the short continuance of this chase; for, though the bear certainly sank

six or eight inches into the snow at every step, he undoubtedly might have gone much quicker than he did, had he chosen it; at all events, he might have proceeded fast enough to have left poor Paijas far in the background. It would have seemed indeed, that if we had had a more favourable line of country before us in the first instance, we might have run him down in a few minutes. The dogs, however, were probably the cause of his not making better use of his legs.

Bears are always more easily approachable on the first occasion of their being started from their winter-quarters than at This is, I believe, admitted by every one an after-period. who knows anything of the chasse of these animals. Probably this may be owing to their senses being confused at their being thus untimely roused from their slumbers; or, perhaps, to some internal cause which makes them incapable of the same exertions as at other times. For this reason, it is always desirable to push after a bear at one's best pace the moment he is started. Though the run was short, it was severe, and we in consequence were much heated after our exertions. prevent getting chilled, therefore, we soon got up a roaring fire. As we had not broken our fast since the first appearance of day, we now refreshed ourselves with the little provision we had in our knapsack: we did not forget a dram of brandy. We then despatched Oloff to Aspberg, whence we were only about three miles distant, for a hand-sledge-such a one as is drawn by men, there being no track in that part of the forest suitable for a horse—for the conveyance of the bear; and, subsequently, after we had unsuccessfully beaten several thick brakes, in the hopes of finding another of these animals we ourselves proceeded to that hamlet.

After wandering in the Norwegian forest for a day or two, we received intelligence of two bears—one in the vicinity of Lutenäs, in Norway, a hamlet situated on the Klar, at some fourteen miles to the north-west; the other in the parish of Lima, in Dalecarlia, which as the crow flies (the regular route being most circuitous), was about fifty miles in a south-easterly direction—in each case rating from Aspberg. The letter containing the information regarding the Lima bear was brought me by my landlady from Lapp Cottage; this had been con-

veyed to that place, in the first instance from Dalecarlia, and, in consequence, it had now performed a journey of one hundred and sixty or one hundred and seventy miles. The good woman was also the bearer of several other letters, one containing a few rix-dollars, which, as I was almost aground for money, proved a very seasonable supply. We subsequently went in pursuit of both these bears; they had, however, been previously much hunted by the peasants, and necessarily rendered exceedingly wild: from this cause, coupled with the state of the snow consequent on the advanced period of the season, and the want of a good dog, all our endeavours to kill them proved unavailing. This being the case, I shall go into but few details.

Prior to starting in pursuit of these beasts, I sent my sledge and such parts of my baggage as I could possibly spare (reserving only as much as two people could carry with facility), back to Lapp Cottage, with my landlady. This I did from thinking it probable we might remain in the interior for some little time longer, when, from the near approach of spring, it became very uncertain when the frost might break up, and the route homewards would in consequence become impassable to any kind of vehicle. By adopting this course, we were left at liberty to roam the forest in any direction we pleased; for, on our skidor, we could skim over rivers, lakes, or the most precipitous mountains with every facility. The weather for the greater part of the month of March had been rather mild, so unlike what is commonly the case in the northern parts of Scandinavia at that period of the year; in that time, we experienced little besides a succession of heavy gales of wind; but the winter was not yet at an end, for, on the beginning of April, the frost once more set in with much rigour; the temperature, indeed, was so severe for the succeeding ten or twelve days, as almost to make me think that it was December or January, instead of that genial month. What the degree of cold might be, I was nevertheless unable to ascertain, as, along with my baggage, I had sent two of my three thermometers to Lapp Cottage: the one that remained was unfortunately only graduated to twenty-six degrees below the point of congelation; but on exposing this to the air, during either

morning or evening, the quicksilver usually dropped in the ball.

We gave chase to the Lutenäs bear in the first instance, that being the nearest to Aspberg. This fellow gave us two or three very severe runs: one day in particular, when the snow was in capital order for our skidor, I think we could not have driven him less than between forty and fifty miles. We were in pursuit at intervals of this bear for about a fortnight; sometimes we lost him in consequence of his tracks being obliterated by the wind; whilst at others, the snow was in so unfavourable a state for our skidor, that we did not deem it advisable to rouse him. In that while we drove him over a vast tract of the Norwegian and Dalecarlian forests. time, I think he could hardly have been less than fifty miles from the point where we originally started him. Though we pressed several people as well as dogs into our service during the period I speak of, we were never fortunate enough to get a shot at this bear. Indeed, it was on but one occasion that we viewed the fellow in the distance. Whilst following this bear, we quartered ourselves, as the chasse led us, at various places in the forest.

On one occasion we stopped for the night in a glen called Nya Lördal, situated at the foot of the Faxe-fjäll. scenery here was very picturesque. A fine river, called the Loren, one of the principal tributaries of the Dal, meandered through the valley, which was rather deeply wooded; whilst, on either hand, the snow-capped mountains rose to a very considerable height. In this sequestered dell there had stood, a few weeks previously, the residences of two peasants; but one of these was burnt to the ground, owing to an accidental conflagration. It was fortunate, however, that there was a friendly roof to receive the destitute family. the houses in Scandinavia are constructed of inflammatory materials, occurrences of this kind are not very common, and this is the more remarkable, inasmuch as the inhabitants are excessively careless of fire. Our host, whose name I forget, was rather advanced in years. In his day he had been the most celebrated chasseur in all that part of the country. If report was to be believed, he had been the hardest and best

runner upon skidor in the parish of Tryssild, which covers no inconsiderable space of ground. He was now in bad health; his sight was dim; he was deaf as a post, and full of This, it was said, was in consequence of the very severe exertion he had gone through in his younger days, when engaged in the chase of wild animals. He was still, nevertheless, a fine and determined-looking fellow. The bear the elk, and the reindeer, abundance of which had formerly been found in the vicinity of Nya Lördal, had formed the principal objects of his pursuit. In his time he had slaughtered great numbers of these animals. As he had not kept any regular account, he was unable to inform us of the number of bears that he had killed; but he thought it must have been upwards of fifty. He generally shot these beasts with the assistance of his dog, which he hunted in a leash, in the manner practised by the Northern chasseurs, when in pursuit of the elk. was usually during the autumnal months, at which period the bears were often on the fjäll sides for the purpose of feeding upon the cranberry, and other berries common to the Scandinavian wilds. In such exposed situations it was easy to see those animals from a long distance, and consequently to steal upon them.

However feasible this plan might be in such an open line of country as I am speaking of, it would be little likely to answer, I should imagine, in deeply-wooded districts; as besides the impediment arising from obstruction of sight, the sportsman would necessarily make so much noise in advancing among the trees, that in all probability the bear would take the alarm, and move himself off to another part of the forest.

Though this man had killed so many bears, he had never been injured by them; but in two instances he had had rather narrow escapes. In one, the bear, which he had wounded some little time before, dashed at him at the top of his speed, and was so nearly in upon him before he had time to fire, that though he shot the ferocious brute through the heart, in falling the animal almost rolled over his feet. The other was a more serious affair; it occurred during the autumnal months. His dog winded two bears, a male and female, from a long distance. On his getting a view of the animals, he fastened

his faithful attendant, as was his usual custom, to a tree, and advanced alone with every caution until he was within some twenty-five paces of the beasts. He now took aim at the male bear, which he described as an immense brute; but very unfortunately, on pulling the trigger, his rifle missed fire. The animal on hearing the click pricked his ears, and stood for a while all attention; this gave him leisure again to put his lock in order, which he did with all imaginable silence; when he again drew his trigger, though, as ill-luck would have it, with no better success than before. The bear, who by this time had discovered whence the noise originated, now dashed at him, and as escape was impossible, and as he had no other means of defence, the man opposed the muzzle of his rifle to the enraged brute; this the animal seized hold of, and deeply indented it with his teeth. The man was behind or near a tree, when pressing his gun against its trunk, in which situation it acted like a lever, he succeeded in wrenching it out of the jaws of the beast. In the act of doing so, however, he fell on his back, when the bear, as may readily be supposed. was quickly upon him. At this moment, fortunately, the dog who was at some distance in the background, either seeing or hearing what was going forward, began to challenge; this attracted the attention of the brute, and, most happily for the poor fellow, for he was quite alone, caused him to walk off. On this occasion the man very fortunately received no injury to his person. The sleeve of his coat did not fare quite so well, as the brute tore that to pieces. But he was horribly frightened, so much so, indeed, according to his own account, that he continued to tremble for a fortnight afterwards. was not a singular case, for I remember of hearing of another person who, having in his younger days escaped with difficulty from the attacks of a bear, was seized with a similar tremor, from which he never fully recovered even in advanced age.

This veteran hunter informed me that both elk and bear had some years previously been much more abundant in all that part of the country, than at the period of which I now speak. This was also the case with the reindeer, which, however, were still occasionally to be found in the neighbouring fjälls in considerable numbers. In one instance, after a severe

chase on his skidor, he ran down a herd of those animals, of which he killed ten or twelve, and if he had had a sufficiency of ammunition he could have shot double that number. He had several children, and, among the rest, a son whom he had caused to be christened Björn, or, in English, bear, which was, perhaps, to commemorate his own exploits. This chip of the old block, who was now middle-aged, enjoyed, like his father in his younger days, the reputation of being the best runner upon skidor in all that part of the country. He was also said to be a good shot, though I did not hear of his having committed much execution among either winged or four-footed game.

Both the father and son, whose adventures I have been enumerating, followed us on one occasion when we gave chase to our bear; but, though these men were the most celebrated chasseurs in all that part of Norway, we were unable, even with their assistance, to bring the pursuit to a successful termination. On this occasion we drove the bear over the top of the Faxe-fjäll. On making the descent of this mountain, whose summit must have been elevated two or three thousand feet above the level of the sea, several of our party met with awkward tumbles; one, indeed, smashed his skidor all to pieces. This was the less surprising, as the declivity was precipitous, and in places the surface of the snow was so hard frozen as almost to resemble a glacier.

In our rambles among the fjälls we met with a good many ripa, some few of which we shot; these birds, as I have said, are numerous in all the more mountainous parts of Scandinavia. At this period Elg was a good deal afflicted with snow-blindness, which was little to be wondered at, as the country we were traversing was generally very open, and the glare from the snow in consequence considerable. But by wearing a small shade over his eyes, and adopting other precautions, he soon got better. I fortunately escaped this evil.

Eleven days after we discontinued the chase of the Lutenäs bear, as we found we had no chance of coming up with him. The last we saw of the animal was on the summit of the Faxe-fjäll. From this spot we wended our way on our skidor across the forest to attack the other bear in the parish of

Lima, which was about sixty miles distance, in a southeasterly direction. This beast was in a very wild range of country, to the westward of the Wenjan Lake, and we chased him with little intermission for a week; but, as I have already said, all our endeavours to destroy him were unavailing; indeed, in that time we never succeeded in getting a shot or even a view. We were often, however, within a very short distance of the beast. Our ill-fortune was principally attributable to the state of the snow; at times this was so hard that the animal's tracks in places were not perceptible, whilst at others, the snow was in such a slushy state from the effects of the sun, that we had literally to plough our way through it. Our dogs were besides useless; for Paijas, though willing, was unable to do his duty; and Passopp, whom we had along with us, though fully capable of keeping up with the bear, had not the inclination. At times he would worry the beast for two or three minutes together, but he quickly came to heel.

During this time we were very scantily supplied with provisions; for these, indeed, we had to send to the hamlets of Öje and Wenjan, which were at a good many miles distance. as all this part of the country was uninhabited. In all this while we had either to bivouac on the snow, or to take up our lodgings for the night at such sätterwalls as we fell in with in the course of our rambles through the forest. As I was without even a blanket on this occasion, and had only a hard bench for my bed, and a log for my pillow, I used to think these quarters were much worse than a watch-fire even in the open air; but as we experienced some heavy snow-storms at this time, it was desirable to be under shelter. Under any circumstances it would not have been a luxury thus to rough it, but after the hard exercises we occasionally took during the day, the evil told doubly. More than one of our runs after this bear, indeed, were so severe, that although stripped to my shirt and trousers, I was heated to that degree as to be perfectly wet through. How I managed to stand it out as well as I did I know not; for Elg, who had a much stronger constitution than myself, became so ill and knocked up that two days before I gave in myself he left me, at his own

pressing request, and made the best of his way to his home at Brunberg, and I returned to Lapp Cottage.

If the snow be in good order, and a man has a good dog, the chase of the bear on skidor is a noble amusement; for even should it prove unsuccessful, he has at least the satisfaction of enjoying an animating run. Should the dog, on the contrary, be worthless, and should the snow be in an unfavourable state, as was the case with us at this time, the pursuit of those animals becomes excessively disheartening. For bear-shooting, a first-rate dog is invaluable, but such are rarely to be found; indeed, with the exception of Paijas, I never met with one at all deserving that character; that gallant hound however was, in his better days, everything I could wish. In one instance I knew him to worry a large bear for nearly eight successive hours, and during a considerable part of this time no person was with him. Sometimes he was alongside the beast, at others a little ahead, and then hanging on his rear, and all this while making the forest ring again with his yells. Though he usually conducted his attacks with caution, in consequence of the mauling he received from a bear in his younger days, his courage at times during this particular chase got the better of his prudence; for, on hearing my shots, he seldom resisted the temptation of having a snap at the haunches of his rugged antagonist. In this case the bear would swing himself round with wonderful agility, dash at the dog, and strike out with his paws in much the same manner as a cat; but Paijas, being up to these manœuvres, always took care to beat a timely retreat. By a dog thus incessantly harassing a bear, the sportsman is enabled to make many a short cut; his continual attacks, besides, often bring the beast to a stand-still, in which case one can generally approach within range of him. When a dog is dodging about a bear in the manner of which I speak, the sportsman should be careful how he fires, or the poor animal may get hit by an ill-directed ball. Indeed, on more than one occasion, I have been so much afraid of shooting Paijas that I have taken the gun from my shoulder without discharging it. A good dog is an immense safeguard to a person, as, should he unhappily fall into the jaws of the beast, his faithful follower might be the means of

saving his life, as on these occasions the dog seldom hesitates to fix at once upon the bear, and by so doing he often succeeds in drawing the attack from his master to himself. High-couraged dogs are not unfrequently killed by the bear during the chase; for, if the beast once gets them within his grasp, he in most cases quickly annihilates them. Several instances of the kind have come to my knowledge.

It is said that when the bear is pursued by dogs he at times becomes so much enraged that he takes hold of the nearest stick or stone he can lay his paws upon, and casts it at them. According to Mr. Nilsson, indeed, when the bear is attacked by the hunter, and whilst beating a retreat (I wish it was my luck never to find him a more formidable opponent), he satisfies himself by throwing these missiles at his adversary. It is reported that the beast is a bad marksman, for, instead of sending his weapon in the direction of his enemy, he not unfrequently whizzes it over his own head. As I never witnessed exploits of the kind on the part of Bruin, I am by no means inclined to vouch for the truth of such stories.

Though a young bear will occasionally take to a tree, in the event of its being attacked, it very rarely occurs that an old one will thus shelter itself from its pursuers. But this happened to Svensson on one occasion. He was chasing the beast on skidor, when all of a sudden he lost his tracks; but on looking upwards, he saw the shaggy monster seated among the branches of the pine. His trusty rifle, however, soon made him bite the dust, or rather the snow—this was very deep at the time—so that when the animal fell to the ground, he was so completely enveloped with that covering, that only one of his hind-feet was visible above it.

A circumstance of the like kind once occurred to the celebrated chasseur, near to Hjerpleden, of whom I have elsewhere made mention. The bear, during the chase, took refuge in a tree; but on the man's firing, he tumbled down—not headlong, like Svensson's—but with his hind-quarters in advance, catching hold, as he fell, of the small branches of the pine. These being insufficient to support his weight, he tore them from the trunk in his descent, so that by the time he reached the

ground, he had his arms full of boughs. The beast, however, was not very desperately wounded, the ball having missed his vitals. When therefore he arrived on terra firma, he lost no time in getting on his legs and dashing at the man; but as the hunter was an admirable runner upon skidor, he fortunately succeeded, though with considerable difficulty, in eluding his clutches. Subsequently the man destroyed the beast.

Though I usually carried only a simple stick in each of my hands when chasing the bear on skidor, I on one or two occasions substituted a light spear in their stead. constructed of some tough wood, and was about seven feet in length. The blade was provided with a case made of ox-hide, to prevent injury to myself, or other persons. This covering, however, was affixed to the weapon in so simple a manner that in a second or two I could throw it on one side and be ready The Laplanders, as well as the inhabitants of the for action. more northern Swedish provinces, are usually provided with similar spears when pursuing a bear or other animal upon their skidor; but the chasseurs of Wermeland and the adjacent parts never made use of those weapons. This was from thinking their weight an encumbrance, and that they could get on faster and better in broken ground without them. They therefore trusted to their heels alone for safety, in the event of coming into contact with these beasts. spears the Laplanders carry in their hands, when upon skidor, are usually very slight. When they purpose attacking a bear in his den with those weapons—a practice not uncommon among that people—they are of a much stouter description. The shaft of the spear, besides, is then cased with iron, to prevent the beasts from tearing them to pieces with their fangs. I have now such an one in my possession.

No one in Wermeland and the adjacent parts thought it worth while to attempt running down the wolf on skidor, which was owing to the deeply-wooded and broken nature of the country, as well as to those animals usually taking to roads or pathways in the event of their being pursued. In Lapland and other more open parts of Scandinavia, nevertheless, these pernicious beasts are frequently destroyed by that means.

If a man be upon skidor when he attacks a bear, and at all near to the animal, he should never allow these implements to be pointed towards him, as, in the event of an attack, he has no time to turn about and get out of the way; they should, on the contrary, be in some measure parallel with the beast, so that when he sees the storm coming he may push on one side. If the bear misses his first dash, he most commonly takes himself off, though sometimes he will pursue a man, let him proceed in what direction he may. In attacking a bear a man ought always to keep the higher ground; for, should he be below the animal when he fires, and his ball not take effect in a vital part, it is very probable the beast will dash towards him at the top of his speed. If, on the contrary, he be above him, he is the better enabled to get out of the way in the event of an attack. It is said, besides, that when the bear sees his opponent has the vantage-ground he seldom makes any hostile attempt.

It is asserted that if a man meet a lion, and has the presence of mind to look him full in the face, the animal becomes cowed, and usually takes himself off. I do not know if this will hold good with the bear, few people, I apprehend, having tried the experiment. Jan Finne says that he can tell by the eye of that animal if he be savage or the contrary, and that, should the beast once steadily look at him, he knows he is not afraid, and he therefore keeps a respectable distance. If a man purposes attacking a bear at close quarters, a double gun is decidedly the best; if it be in the winter-season, a detonator is very preferable. Owing to having flint locks, both my barrels, as I have shown, missed fire, one on an occasion which might have been attended with most serious consequences; a large ball is very desirable. The best points to hit a bear or any other animal are in the forehead, in the breast, under the ear, or at the back of the shoulder; bullets placed in other parts of the body of an old bear usually have little immediate effect. If the snow be deep, and the bear is crossing a man, he should always aim very low; he must often, indeed, fire into the snow if he expects to hit the heart of the beast.

The chasse of the bear on skidor is certainly attended with some degree of danger, for, in the event of the animal coming

end on at a man in close cover, it is not easy on such unwieldy machines to get out of the way. The bear, it is true, generally runs at the sight of a person; but, if he be wounded, he frequently turns, and, as has been seen, inflicts a terrible vengeance upon his assailants. I have heard of several men having been killed, and many is the poor fellow that I have met with in different parts of Scandinavia who has been desperately injured by these beasts. An old chasseur, near to Gefle, named Jäderström, assured me that on one occasion a party of seven Finns and Laps attacked a bear upon their skidor, but they did not succeed in destroying the beast until five of them were severely wounded; one of them was entirely scalped. Jäderström was not present himself on this occasion, but he saw the bear and the wounded men brought down from the forest.

Lieutenant Oldenburg mentioned several instances of people having been wounded by bears when pursuing them on skidor, that came within his own knowledge. A peasant, indeed, with whom he once lodged in the parish of Ora, in Jemptland, had been severely lacerated by one of these beasts. man, in company with several others, was in pursuit of the animal, but being the best runner of the party, he was the first to come up with him, when, discharging his rifle, he severely wounded the beast. The latter in his turn now rushed at the hunter, who, to save himself, wheeled about and endeavoured to get out of the way; he presently, however, came to a little precipice or steep declivity, down which he tumbled headlong, and in a moment afterwards the bear was on him. The ferocious beast now quickly tore out one of his eyes, and otherwise wounded him severely in the body; he bit him so badly, besides, in the hand, that he ever afterwards lost the use of three of his fingers. It is probable, indeed, he would have killed him had not his companions at last come to the brow of the precipice, when, seeing the bear seated upon the poor fellow's body, they immediately shot him through the head.

On another occasion, when Lieutenant Oldenburg was in the parish of Torp, in Norrland, he saw a chasseur brought down from the forest who had been most desperately wounded

by a bear. This man, as in the instance just narrated, from being some distance in advance of his party, was alone when he fired at and wounded the animal. On receiving the ball the brute turned upon him, when, being unable to escape, and having neither knife nor other weapon, he grappled with him, and both soon came to the ground. Here a most desperate struggle took place, which lasted for a very considerable time, sometimes the man, who was a most powerful fellow, being uppermost and at others the bear; but from loss of blood and exhaustion the chasseur was at last necessitated to give up the contest, when, turning on his face in the snow, he pretended to be dead. The bear on this quietly seated himself on his body, in which situation, it was thought, he remained for near half an hour; at length the sufferer's companions came up, when, observing his deplorable situation, they shot the beast through the heart. When Lieutenant Oldenburg saw the unhappy man, his face, breast, arms, and legs were all a mass of blood, but though so terribly mauled, he had the good fortune eventually to recover.

It is a commonly-received opinion that she-bears with cubs are the most dangerous, but even these do not always turn upon their assailants. On two occasions I have been immediately near to and wounded these animals when thus circumstanced without their attempting to molest me; indeed, on the contrary, though both might readily have got hold of me, they left their cubs to their fate, and made their best efforts to escape. In one of these instances I was quite alone. She-bears with cubs will, it is true, often attack people, but, generally speaking, the old males are the most savage. These very generally turn upon their opponents if they are wounded. They are, besides, the more to be dreaded from their enormous prowess.

## CHAPTER XIX.

One more Chapter on Bear-Hunting—A very hard run on Skidor—Fatiguing Work—Quite a Monster—The Fat in a state of liquefaction—The Return—Another dangerous case—Camping out in a Snow-storm—A fresh Start—The Bear charging—Narrow Escape.

To continue—I was myself in some danger from one of these fellows during the last winter. I shall detail the particulars, which may not be altogether uninteresting. This animal had, for some time previously, committed very great ravages among the cattle in the line of forest situated between the river Klar and Dal. During the preceding summer, indeed, he was said to have slaughtered upwards of twenty horses alone. He was the terror of the people in those parts. Very fortunately my man Elg, in his rambles through the forest at the setting-in of the winter, fell in with and ringed the tracks of this beast; this was no considerable distance from the northern extremity of Moss-sjön; but as at that time there was little snow in the forest, we left him undisturbed until the week before Christmas.

At the latter period, Elg and myself proceeded quite alone to the ring, which we searched in our usual silent and cautious manner; but it was not until the evening of the second day, owing to the circle being of great extent, that we met with the beast; he, however, was so much on his guard that, before we observed his lair, he bolted from it and moved off. At this time the fellow was not more than twenty paces distant; but owing to the trees being loaded with snow, I only got the merest glimpse possible of him. I nevertheless fired one of my barrels, which was charged with two balls, but the brake was so thick that one if not both of them was interrupted by the intervening trees, and in consequence he escaped unhurt. It would have been useless to give chase at this time, for there was too much snow on the ground to enable us to move with any expedition on foot, and too little to make use of skidor to advantage; we therefore thought it best to let the beast go off without further molestation. In the course of the two

following days, however, we again succeeded in ringing him; though this was not until he had proceeded some nine or ten miles farther to the northward. Here, for a while, we allowed him to rest in quiet, when shortly we experienced a very heavy storm of snow, which continued with little intermission for three days: on its cessation, the ground was covered with that substance to the depth of from two to three feet. We now thought it time for action; the weather being fine and frosty, we proceeded to the new ring, which was at no great distance from the Finnish hamlet of Näsberg, in the hopes that fortune might prove more propitious.

On this, as on the former occasion, we were, I may say, alone; for, though Svensson, whom we had fallen in with at Näsberg, and another peasant, followed upon our track, with an axe and a little provision, it being uncertain where we might quarter for the night, only Elg and myself were armed with guns. In this instance we had Hector along with us. We were now, of course, provided with our skidor. Though the greater part of the snow had so recently fallen, yet, owing to the storm having been accompanied by a very heavy gale of wind, it had, from drifting, obtained such a consistency, that those machines did not run very much amiss. ness of the snow told both ways; for though it was far from being in a favourable state for our skidor, yet we were certain the bear when roused must, from his great bulk, sink to the In point of fact however, I believe ground at every step. my people were little hopeful of our meeting with success on this occasion; but, as I thought, that even should he escape us for the time, there was no great harm done, I determined on giving him a gallop.

As a fortnight had now elapsed since we had chased the bear near to Moss-sjön, we thought it not improbable that his fears might by this time have in some degree subsided, and that we might be enabled to steal upon him whilst in his lair. Ordering Svensson and the other peasant, therefore, to remain without the ring, which was of an inconsiderable size, Elg and myself proceeded to look for the beast. That our movements might be effected with the greater silence on this occasion, we divested ourselves of our skidor, and proceeded on foot. The

fatigue of getting along was now very great, for in many places where the snow had drifted, we sank down nearly to our middles; the snow, besides, was hanging in such masses on the trees that, in the closer brakes, we could hardly see more than a pace or two ahead. These would have been very trifling evils had our manœuvre succeeded; but this, unfortunately, was not the case; for the bear, from some cause or other, had taken the alarm, and long before we fell in with his lair, which occupied the whole surface of an immense ant-hill, he had bolted from it.

We now lost as little time as possible in rejoining the people, when, resuming our skidor, we instantly gave chase to the bear at our best pace. Though Elg and myself, when on foot, waded through the snow with so much labour and difficulty, the bear, from his enormous strength, and the wide spread of his feet, was enabled to make his way through it with apparent ease and facility. He did not, however, proceed at a gallop, excepting in particular places, to which, indeed, I suppose he was unequal; but he still managed to shuffle forward at no contemptible pace. Had the fellow now held to an open line of country, I apprehend we should soon have run him down. But he had too much wit, and instead of thus exposing himself, he held to the most broken and precipitous ground, and to the thickest and most tangled brakes in the forest; in consequence of this our course was naturally much impeded. This was bad enough, though still, if Hector had stood well to the animal, we might, in all probability, soon have come up with him, but after pursuing the beast for some little distance the dog fell to heel, and thus was of no manner of service.

These were discouraging circumstances, but, still hoping for the best, we continued to push forward at the top of our speed. At last, after the chase had continued for almost three hours, and after we had been contending for some time with rising ground, we reached the summit of a considerable elevation. From hence we had the gratification of viewing the object of our pursuit at about two hundred paces distance, as he was making his way across a newly made svedgefäll that lay on the slope of the hill below us. At this point the snow

had drifted very much, and was from three to four feet in depth, and, in consequence, the beast had literally to wade through it. We now dashed forward at our best pace, in the hopes of being able to intercept him before he should reach a thick brake on the opposite side of the svedgefäll, towards which he was making; but finding we could not accomplish this object in sufficient time, I halted when I had advanced to within about seventy paces of him, and levelled my rifle. In this instance, however, I played a most stupid part, for though I had ample time to fire, I delayed so long in attempting to take a certain aim, that the fellow slipped into the thicket and disappeared without my having pulled the trigger. The fact was, his hind quarters were principally exposed to me, where a bullet, of course, would have had but little effect. This was a sad mishap, and from vexation I felt almost inclined to smash my gun to pieces.

A delay of about three or four minutes now took place, in consequence of Elg having to return some little distance for the case of my rifle, which we had cast upon the ground when we first viewed the bear. In this interim, the peasant coming up with our knapsack, we indulged ourselves with a dram and a crust of bread, which was of no little service in recruiting our exhausted strength. We then resumed the chase, but the animal having the start of us, we for a long while saw nothing more of him. We now began to be apprehensive that, for this day at least, we had seen the last of the beast. Elg, indeed, said it was next to useless continuing the pursuit, but not caring to throw a chance away, I determined to persevere until nightfall. Thus disappointed, we continued to drag ourselves along as fast as our jaded condition would permit, and until after the shades of evening had set in. last, however, when we were in a rather open part of the forest, the object of our pursuit suddenly reared himself up from among a cluster of small pines situated on a little eminence at some twenty-five paces in advance of us, and presented himself to our view. I now lost no time in slipping my double gun out of its case, when, as the fellow was slowly retreating among the bushes, I discharged both my barrels at him almost at the same instant. On receiving my fire, the monster, with his jaws distended, partially swung himself round, when, growling furiously, he seemed as if he was on the point of dashing towards us. But the snow thereabouts was unusually deep, which, coupled with the state of exhaustion he must naturally have been in from the long run we had given him, caused him, probably, to alter his determination, and, instead of attacking us, he continued his retreat. This was, perhaps, fortunate, for, as he had the vantage ground, and we were encumbered with our skidor, it might have been difficult for us to have got out of his way.

Svensson and the other peasant now shortly came up, when, after reloading my gun, and making the locks as water-proof as possible in my usual manner, viz., by means of a candle-end that I carried about me for the purpose, we lost no time in following up the bear, which was evidently much wounded, as we saw by his tracks being deeply marked with blood. it was the post of danger, I now led the way, Elg and the peasants following in my wake. Thus we proceeded for some distance, until we came to a very thick and tangled brake. Having a suspicion that the beast might have sheltered himself here, I made a little detour around his tracks, and succeeded in ringing him. I now lost not a moment in taking off my skidor, for in the event of an attack in close cover, these machines, as I have said, are highly dangerous, and advanced on foot into the thicket. But I had not proceeded more than two or three paces, when a most terrific and lengthened growl announced that the bear was still in existence, and the next moment—and at only some ten or twelve paces distance—the quantity of snow which was hanging in the trees having prevented me from previously observing him, I viewed the fellow dashing forward at the full gallop; fortunately, I was not altogether taken by surprise, for my double gun was not only out of its case, but both the locks were on the full-cock. This was well, for the beast came at such a rattling pace that, by the time I had discharged my second barrel, he was within less than a couple of paces of the muzzle of my gun. When I fired my last shot, he was not coming directly towards me, for either my first had turned himwhich the people asserted was the case—or he did not observe us, owing to the closeness of the cover. By swerving my body to one side, however—for I had no time to move my feet—he luckily passed close alongside of me, without offering me any molestation. This, indeed, I apprehend, was out of his power, for after receiving the contents of my last barrel, he slackened his pace, and by the time he had proceeded some few steps farther, life was extinct, and he sank to rise no more.

Elg, who was only a short distance from me, behaved very well on this occasion, for though my rifle was in readiness in his hand, he refrained, agreeably to my previous instructions, from discharging it. My orders to him were, as I have said, only to fire in the event of the bear actually having me in his grip; and to these directions, which few other men, under the circumstances, would probably have attended to, he paid obedience.

Our prize proved to be an immense male bear. I subsequently caused him to be conveyed to Uddeholm, a distance of between forty and fifty miles, when we ascertained his weight to be four hundred and sixty English pounds. This, it must be recollected, was after a severe run, during which he had probably wasted not a little, and also, that it was in the winter-time when, from his stomach being contracted, he was naturally very much lighter than he would have been during the autumnal months. In point of fact, had this bear been slaughtered during the latter period of the year, his weight would probably have been between five and six hundred pounds.

On opening this beast, thirty-six hours after his death, and during the intermediate time he had been exposed to the open air, when the temperature was pretty severe, we found that, owing to his excessive exertion, nearly the whole of the fat of his intestines was in a state of liquefaction, and in consequence we were necessitated to scoop it out with a cup. I have already made mention of this circumstance when speaking of the chasse of the bear during the summer season. On taking the skin from the beast, we found he had received my eight bullets, for though I only fired four times, I had on each occasion two running balls in either barrel. The balls from the two first discharges (as it was supposed) took effect rather

high up in his side, the point exposed to me. Those from the third were received in the animal's mouth as he was coming with distended jaws towards us, when they carried away half his tongue and one of his fangs; whilst those from the fourth discharge passed either through or immediately near to his heart, and caused his almost instant dissolution.

By the time the chase was concluded, both Elg and myself were nearly exhausted from fatigue. For the health of the former, indeed, I began to feel some apprehension, for though we hardly remained stationary for five minutes, owing to his blood cooling too suddenly, he began to tremble like an aspen leaf. He wore a linen shirt, the greatest of all evils in cold countries, which was probably the cause of it, for I myself being provided with flannel, suffered no inconvenience of the like nature. A little brandy, however, which we had still remaining in the flask, soon renovated our worn - out frames.

It was not far from dark when the chase concluded; and as the weather was rather severe, and we were careless of bivouacking in the forest, after our recent exertion, we left the bear where he had fallen, and at once made the best of our way to Näsberg, whence we were only a few miles distant; but owing to the darkness, and to our being unacquainted with the way, it was three hours after sunset before we reached that hamlet.

Though Svensson had been in at the death of more bears than any man in Scandinavia, he stated that he had never seen but one equally large as that which we had just annihilated; this fellow was nearly giving him a broken head. The circumstances were these. Along with five or six other chasseurs, he was chasing the beast on his skidor, when, after the run had continued for a time, and after the animal had been slightly wounded, the latter took refuge in a close brake. The cover was here excessively thick, which, together with the trees being deeply loaded with snow, rendered it almost impenetrable. Svensson and his companions did not in consequence deem it prudent further to molest the monster in such a situation, and for a while therefore they endeavoured by shouts to drive him from his position; but as he remained

immovable in spite of their cries, their patience became exhausted, and they determined, let the consequences be what they might, upon attacking him at close quarters. For this purpose they all took off their skidor, when Svensson leading the way, the rest following closely upon his tracks, the party advanced silently and cautiously into the thicket. Here they soon descried their shaggy antagonist, when, discharging their rifles in concert, they succeeded in severely wounding him: but their balls not taking effect in any vital part, only tended to enrage the beast, who, wheeling about on the instant, made towards them at the top of his speed; by throwing themselves on one side, however, they very fortunately avoided the onset, and the bear, passing within a pace or two of them, betook himself to another part of the forest, without in any manner molesting them. They had a very narrow escape on this occasion, for the animal was so near to them, that some of the snow which he knocked from the trees in his progress actually fell on their persons. They attributed their safety, as was doubtless the case, to the density of the brake, rendered doubly so by the masses of snow hanging in the trees, having concealed them from the view of their ferocious assailant.

This bear made good his retreat from Svensson and his companions on this particular occasion, but some days afterwards they were fortunate enough to destroy him. He had near a hundred weight of fat about him.

On a second occasion I was also in some danger from another capital male bear. As in the last instance, I shall relate the particulars at length. This animal was accidentally roused from his den in the winter season by some peasants who were felling timber in the forest, in the parish of Ny, in Elfdal; but after he had proceeded a short distance, he again laid himself down in the wilderness, for the purpose, doubtless, of reposing during the remainder of that inclement season; and here he was ringed, or encircled. This beast was supposed to be an old marauder that for several preceding years had committed great ravages among the cattle in that part of the country. This being the case, his death was devoutly to be wished for, and those who had ringed him deemed it more advisable to get up a skall than to attempt his destruction by other means.

Such being the case, information was sent to Mr. Falk, who in consequence ordered out four or five hundred men.

I was present at this battue, which took place at about five or six miles to the eastward of Lindebohl; but as no circumstance of particular interest occurred. I shall confine myself to stating that soon after the cordon was formed around the beast, and after several shots had been fired at him, he became desperate, and, dashing through the ranks, for that time made good his retreat. After the bear had escaped from the skall, he made across the country, in nearly a direct line, about fourteen miles to the southward, and here he was once more encircled by the peasants. This intelligence was soon conveyed to Mr. Falk, who thereupon ordered out six or seven hundred men to form a second skall for the destruction But prior to this taking place the beast, of the animal. either from disliking his new quarters or from being disturbed, deserted them, when, striking through the forest in a northeasterly direction, he did not again lie down until he was within seven or eight miles of Ytter Malung, in Dalecarlia. As it was not very practicable, however, to get up a battue in that province, and as the point where he was now ringed was far too distant from the more habitable parts of Wermeland to collect a sufficient number of people together, the chances of destroying the beast by that or perhaps other means became very problematical. From this cause, therefore, the peasants sold me all right and title to the animal, which they had hitherto refused doing, for a trifling consideration.

In the part of the country where the skall of which I have just spoken took place, there was very little snow upon the ground, but in the district where the bear was now ringed it was considerably deeper. From this circumstance I entertained great hopes that, by seizing a favourable opportunity (the snow being then in too loose a state for the purpose), I might be enabled to run him down on my skidor. Under this idea, I took up my quarters at Găstjënberg, the solitary residence of a peasant, situated to the eastward of Näsberget, and at some six or seven miles distance from where the bear was then lying. This was the nearest habitation to the beast, who was ringed in a very wild and savage range of forest

called *Tio mil Skogen*, or the seventy miles wood—so designated from its extending that distance north and south, without, I believe, the intervention of a single house.

For several days prior to this period we had experienced partial thaws, the weather being unusually mild for the season of the year; but at last a slight frost set in. Thinking that the snow had now attained a sufficient consistency for our purpose, I took Elg and Svensson along with me, and set off one morning at the first dawn of day on my skidor for the ring. Though during the time that had elapsed since the bear had been last on foot much new snow had fallen. Bruin's tracks in most places were still very visible; on reaching the ring, therefore, which was of great extent, we followed them with all imaginable silence. This was not exactly under the notion that we should be enabled to steal upon the beast before he was roused from his lair, as, from his having been already so much disturbed, we had reason to suppose he was far too much on his guard to allow of our near approach, but that we might at all events have something like a fair start when he should bolt from his den. Thus we proceeded for an hour or more, but our progress was slow, as in places the tracks of the brute were nearly imperceptible, and in others it was very difficult to distinguish the right one in consequence of the doubles that he had made. Much snow had fallen during the preceding day, and a great deal was hanging This was unfortunate for our purpose, for as in the trees. there was only a degree or two of cold, and the morning was clear, by the time the sun rode pretty high in the heavens the snow began to melt, and the water in consequence to drip from the foliage. Seeing this to be the case, and knowing that in a very short time the snow under foot would be in such a state as to render it impossible for us to make much expedition on our skidor, in the event of our getting the bear on foot. I deemed it more advisable to leave him for that time in quiet possession of his quarters, and to wait until a more favourable opportunity should offer to attempt his destruction.

We now, therefore, retraced our steps out of the ring, but as the distance to Găstjënberg was considerable, after proceeding to some little distance, that we might not alarm the bear, we got up a bivouac in our usual manner, where we determined to remain until the following day, in the hope that the weather might prove more propitious. During the succeeding night, however, we experienced a heavy storm of snow, and as we were without covering of any kind, we passed it rather uncomfortably. Seven or eight inches of that substance fell, and as this, owing to the warmth of the fire, melted on our persons as it came down, we were thoroughly wet through by the following morning. This storm, nevertheless, would have been a trifling evil had it not interfered with the object we had in view; but besides that the trees were now loaded with snow, the latter was so loose underfoot that we could only plough our way through it with great difficulty. This being the case it would have been almost madness to start the bear, for had we not succeeded in stealing upon him whilst in his lair—a very improbable thing, as I have said, from his known shyness, there was no kind of chance of our subsequently being able to run him down; and besides this, it was not impossible but that if once on foot he might betake himself to the southward, or to the line of country whence he had originally come from, where there was little snow upon the ground, and where, in consequence, we could not have used our skidor to any advantage. For these reasons we thought it best to leave the animal undisturbed.

After my people, therefore, had once more made the circuit of the ring, for the purpose of ascertaining if the beast was still within it, for we were rather apprehensive we might have approached too near to his lair on the preceding day, and that he in consequence had moved himself off, we reluctantly turned our backs upon him and retraced our steps homewards. In our progress through the forest, however, we had not the most agreeable time of it, for, owing to the mildness of the weather, the snow adhered in masses to our skidor; and from the like cause it became dissolved upon the trees, whence the water dripped as from a shower-bath.

On the succeeding day we experienced some little cold, and the snow in consequence became in tolerable order; thinking it therefore time for action, we again set off, as the evening was closing in, for the vicinity of the ring. We thought it best, for two reasons, to pass the night in the forest; one, that we might not tire ourselves too much before the chase commenced; the other, that we might be enabled to rouse the bear as soon as it was well daylight. It was very desirable to adopt the latter course, which, from the distance, would not have been very practicable had we started in the morning from Gastjenberg, for, owing to southerly winds, and the comparative mildness of the weather, we could not calculate upon the snow remaining in tolerable order for our skidor for any considerable length of time after the sun was above the horizon. In this instance we passed the night in our bivouac far from uncomfortably; the weather was clear and calm, and as we had a capital fire, we suffered little inconvenience from the cold.

The following morning was fine and slightly frosty. Soon after daylight, therefore, and after partaking of a plentiful repast, we set off for the ring, which was situated at an inconsiderable distance from our watch-fire. On this, as on the former occasion, I was only accompanied by Elg and Svensson. I was armed with my double gun, and Elg with my rifle; but Svensson, who was the bearer of our kit of provisions was provided with no other weapon than an axe. We had a very tolerable dog called Jägare along with us, but though he stood well to a bear for a while, he was nothing equal to Paijas in his better days. He came from Lapland.

As we had traversed fully the one half of the ring when we were there on the previous occasion, and, in consequence, there remained no very great extent of ground to go over, we fully anticipated soon getting the bear on foot. In this we were not disappointed, for we had not proceeded far when, coming to a thick and tangled brake, Jägare evinced by his eagerness and agitation, that the animal of which we were in search was not far distant. On seeing this we pushed forward in the direction indicated by the dog, but when we reached the lair of the beast we found it deserted, he having the instant before, as we had reason to suppose, wisely taken himself off. We now slipped Jägare from his couplings, who, making after the bear, was soon only to be heard in the distance.

Though the snow, as I have remarked, was pretty deep on the ground in this part of the forest, the bear dashed through it at the full gallop with the most perfect facility; but it was in pretty good order for our skidor, so that, though Elg and myself (for Svensson followed at some distance on our tracks) could not keep up with him, we were enabled to push forward at a very tolerable rate. After the animal, however, had gone about a couple of miles, and when he came to a part of the forest where the snow was looser and deeper than in that which he had hitherto traversed, he slackened his pace and proceeded at a long trot. At the commencement Jägare stood well to the bear, but though we heard his challenges in the distance, we were not enabled to make any short cuts from the beast striking through the country in nearly a direct line. After a time we came up with the dog, who had partly discontinued the pursuit, and who thenceforth kept so little in advance as to render us but trifling assistance. For a while we saw nothing of the bear, but when the chase had continued for upwards of an hour we got a glimpse of him at about forty paces distance; he was facing up a deeply wooded, and rather abrupt acclivity overhanging a small glade, or opening in the forest, along which we were then pursuing our way; but our sight of him was so transitory, that, before we could get our guns out of our cases, he was lost to our view. We had now to ascend the rising ground over which the beast had betaken himself, but, as it was rather steep, we lost some time before we surmounted it, and he, in consequence, again got a little the start of us.

After the lapse of about half an hour more, however, and as we emerged from among the trees on to a little plain or morass, we had once more the gratification to espy our game at about one hundred paces in advance of us, as he was slowly making his way across this opening in the forest for a rather lofty and precipitous chain of hills which were situated on its opposite side. I was not in the habit, as I have said, of allowing my people to make use of their arms on these occasions, but being apprehensive that this bear, whose death on every account was so much to be desired, might possibly escape us, owing to the season being advanced, the state of the snow, etc.,

I ordered Elg, who carried my rifle, to send a bullet after him. The hind-quarters of the beast were at this time towards us, and I had not therefore an expectation of its being attended with any serious results; but I still thought it probable that if he were wounded, his progress would be so much retarded as to allow of my approaching within good range of him with my double gun. In this anticipation I was not disappointed, for on his receiving Elg's fire—which, by the by, did not do him any actual injury, the ball, as we subsequently ascertained, only grazing the skin of his fore-leg-he became enraged, when wheeling about, he dashed towards us as fast as he was able. He had not, however, advanced very many paces before he was assailed by Jägare, who, encouraged by our presence, gallantly made at him, and by attracting his attention, was thus the means of diverting from ourselves the threatened storm. The snow had hereabouts obtained a considerable degree of consistency, for though in most places the bear sunk a foot or more into it; in others, its surface altogether supported him.

Whilst this was going on, I was not idle, for leaving Elg to reload his rifle, and with my gun, which I had slipped out of its case, in the one hand, and a stick in the other, the better to impel myself forward, I dashed on my skidor towards the brute. It was a very amusing sight at this time to see the beast, who in appearance was as large as a well-grown pony, as he made his attacks upon the poor dog. When he found his attempts to get hold of the dog were unavailing, he continued his course across the plain, whilst I pushed after him at my best pace. But he did not seem much to notice my approach, his attention being taken up with Jägare, who was hanging close in his rear, until I had advanced to within a short distance of him, and then, instead of attacking me, he became intimidated, when taking to his heels, he went off in the opposite direction at the full gallop.

At this period the bear had all but gained the extremity of the little plain, and was on the point of again plunging into the thicket. As I found he was gaining upon me, no time was to be lost, so halting when at about twenty paces distance from him, I quickly levelled and discharged one of my barrels. On receiving my ball, which only slightly wounded him, the beast spun round with the rapidity of a tetotum, when, uttering a terrible growl he, with distended jaws, was in the act of dashing towards me; but his career was soon at an end, for taking a snap shot with the other barrel, I had the good fortune to split his skull open, on which he instantly fell dead on the snow. It was well that my last bullet told properly, or I should have been in an awkward predicament, as now that my gun was discharged, I was without weapon of any kind, and Elg was a long distance in the background.

We were fortunate in putting the beast hors de combat thus early in the day, for in the course of an hour afterwards the snow, from the effects of the sun and the mildness of the temperature, adhered in such quantities to our skidor, that we could only get along at a snail's pace. Had we not destroyed the animal, indeed, on this occasion, I am very doubtful whether, owing to the unfavourable state of the weather and snow, we should have been able to run him down upon our skidor during the remainder of the season.

We soon lighted a fire to dry our clothes, which were well saturated with wet from profuse perspiration, and when we were rejoined by Svensson—which was not until an hour or more afterwards, for during the chase he had broken one of his skidor—we skinned and cut up the bear. He was an enormous fellow, but we had no means of ascertaining his weight, as the part of the forest where he breathed his last was far distant from any habitation.

## CHAPTER XX.

The Elk abundant in some parts of Norway and Sweden— Curious Notions regarding it—Size and Appearance— Hardy Nature—Habits—The Rutting Season—Frequently destroyed by Bears and Wolves—Its Flesh and Skin.

A QUARTER of a century ago, with the exception of every tenth year, it was altogether prohibited to kill the elk at any season; but in Sweden at the present time they may now be shot every year from the 1st of August to the 1st of December, and in Norway from the 1st of August to the 1st of November.

In no part of Scandinavia has the increase of the elk been more rapid than in the Wermeland and Dalecarlian forests. Twenty years ago I might wander in those wastes for days or even weeks together without seeing a single track of these animals, whereas at the present day their tracks, stale or fresh, are quite common. The great increase in their numbers is mainly attributable to M. Falk, who for years very strictly preserved a large tract of forest near to his residence, where they grew and multiplied, and subsequently spread themselves throughout the surrounding country. According to Ekström the limits of the elk, as relates to Scandinavia, are between 58° and 64° of north latitude. But there are exceptions to this rule, for he is occasionally to be met with as well considerably to the southward as to the northward of the specified boundaries. Indeed, when I was in Tornea, which is in about 66° of latitude, they spoke of an elk that had been killed thereabouts some years previously, and stragglers are at times shot even still farther to the north.

Many curious notions were formerly entertained respecting the elk. It was believed, for instance, that his legs had neither knees nor joints;—that when he slept, therefore, he leant against a tree, for the reason that if he once lay down he could not rise again;—that his long upper lip prevented him from browsing in the customary manner, so that when thus occupied he was constrained to walk backwards;—that he was subject to epileptic fits, and cured himself by opening with his hind-foot a vein at the back of his ear.

By the ancient West Gothland laws the elk, together with the fox, the wolf, the lynx, and the bear was classed as a Skade-djur, or noxious animal, and a price was not only put on his head, but he was allowed to be killed even on another man's property. The lucky hunter was moreover entitled to the carcase. When the number of elks was great, and the population scanty, they were no doubt inconvenient neighbours; for it cannot be denied that they not only in some degree damage the copse-wood, but occasionally make free

with the Hö-hässjor, or little stacks of hay, as also of those of moss, stored up by the peasants as a winter's supply, both of which one so frequently meets with in the northern forests. These animals are besides accused of trampling down and feeding on grain, more especially in the so-called Svedje-fall, or clearings in the woods. But now that their numbers are so greatly thinned down, the injury they commit is comparatively trivial, and the Government has perhaps done well—though the squatters are not exactly of that opinion—in transferring the elk from the catalogue of Skade-djur to that of game, and instead of paying premiums for his destruction, in protecting him in every way.

The elk is most ungainly in appearance; his height at the shoulders, independently of his head and neck, being greater than his length. Pontoppidan, when speaking of this animal, of which it must be confessed he gives a somewhat marvellous account, says: "He is very long-legged, insomuch that a man may stand upright under his belly." It is true, nevertheless, that he attains to an enormous size. Within the memory of man he has been killed in Sweden upwards of seven feet in height, and been known to weigh thirteen to fourteen hundred pounds. His head is of a disproportionate length, and his ears long and pendent. His usual colour is a very dark brown.

The antlers of the male European elk are inferior in size to those of his compeer on the American continent. It is the generally received opinion that the elk, with others of the deer tribe, sheds his horns every year. But the point, though probably without reason, is questioned: some contending that this is only the case with the younger males, the horns of the adults being less frequently renewed—say every second or third year. The female elk, as is known, has no antlers. The antlers of the elk are palmated; and their formation is, as with other horned animals, intimately connected with the organs of generation. One was, however, shot some years ago, the horns of which resembled those of an ox—they were round, and had each only a single point; but in other respects they were of the same colour and substance as those of other elks. On examination after death, it was found, as surmised, that in

consequence of an accident—probably the effects of a bullet—the animal had been emasculated.

The elk is of a hardy nature. Ekström, when limiting him to the 64° of northern latitude, tells us that he is unable to endure so great a degree of cold as the stag, or rein-deer, thereby implying, it is to be presumed, that he cannot exist in the far north. But the severity of the climate is not, I imagine, the real cause of his absence from the more northern portion of Lapland. This is attributable, in my opinion, to his having been exterminated—so at least it would appear, for more than one writer tells us he was formerly pretty common in that wild region.

The elk is a first-rate swimmer; he ploughs the water with such force and rapidity, that it quite foams in his front; and owing to the peculiar conformation of his hoofs, he has great facility in traversing bogs and marshy ground. His usual pace when alarmed is a long trot, very many feet intervening between each stride; but he can, if he chooses, as is not unfrequently the case, go at a tremendous gallop.

The elk's sense of smell is exquisitely fine. With care and caution, if one goes against the wind, he is not very difficult of approach, more particularly during stormy weather. But if he once scents a man, which he can do at an immense distance, he is off like lightning. Bears and other beasts will, when chased, halt every now and then, and perhaps, if the pursuit ceases, remain stationary. But it is not so with the elk; for once started, and whether followed or not, he, without looking behind him for a single instant, speeds on his course. Once in a time, it is true, after running two or three miles, he may halt; but more commonly he goes at least double that distance before coming to a stand-still, and this, too, in the winter, when there may be two or three feet of snow on the ground.

The elk delights in the recesses of the forests. In the summer time his favourite resorts are low and marshy grounds, where there is abundance, not only of water, but of deciduous trees. In the winter time he seeks the higher grounds and the thicker covers, for the reason, as supposed, that he may be the more sheltered from storms and bad weather. Though

we are told somewhat to the contrary, I have reason to believe that elks are not in the habit of congregating either during the winter or the summer. They would seem to live much alone, or in separate families, for one often meets with father and mother, and perhaps a fawn or two together. It happens, however, that twelve or fifteen, or even more, are seen in company; but in these cases the animals have probably been previously hunted.

The elk is not a great wanderer, at least in the winter time, at which season I have had most opportunity of observing his Possibly, however, this may be owing to the depth of snow impeding in degree his movements. If left undisturbed, indeed, he will often remain for weeks, or even months together, on the same hill-side. If there be several elks in company, and that they be pursued, they for the most part follow in the same track, and that so exactly, and in a string as it were, that it is not always easy to see if there is more than a single one. They at times are said to keep so close together that the snout of the one nearly rests on the haunches of the other. The old always take the lead, and the young follow in their wake. When going at a good pace, their heads are carried horizontally, so that the antlers of the males necessarily rest on their necks, and as a consequence offer but little impediment to their progress.

Considering the density of the northern forests, and the very difficult nature of the ground, it has often astonished me to see the manner in which the elk, when pursued, will cross the country—and that as the crow flies. Neither boulders nor Vind-fällen-which, as said, are accumulations of prostrate trees-nor precipitous acclivities, impede his onward course; and he crashes through the thickest brakes and the most tangled coverts as if crossing the level and open plain. does the snow, even if two or three feet deep, unless the surface be frozen, offer any serious hindrance to his movements. It has seemed to me, that when in the winter time he thus rushes over fragments of rocks and logs, and, owing to the obstacles beneath being concealed by the snow, knows not where he places his feet, he must inevitably break his neck or legs; but such accidents are of rare occurrence, and during

my long sojourn in the northern forests only one or two instances of the kind ever came to my knowledge.

The elk is a ruminant animal. He feeds chiefly in the daytime—rarely indeed during the night, unless the moon be shining bright. Hence if he be pursued for two or three consecutive days, more especially in the winter, in which time he has little facility of selecting his feeding-ground, he becomes exhausted, rather from inanition than fatigue, and falls an easy prey to the hunter.

The food of the elk varies considerably according to the season of the year. In the summer-time it consists of the bark, leaves, and smaller branches of young trees; such as the aspen, the mountain-ash, the birch, the alder, the sallow, and more especially of the different kinds of willow; of the sprigs of the cowberry and bilberry; of ferns and of heather when in blossom; of several species of fungi; of the rein-deer moss; as also of different sorts of grasses and plants, more particularly those growing in marshy situations, such as rushes, sedges, the river horse-tail, and the marsh mari-gold. During the rutting season he eats the Ledum palustre, which has the effect of making him more savage and inflaming his desires. In the winter, when the ground is deeply covered with snow, and when he no longer has access to the herbage beneath, his food chiefly consists of the smaller branches of the trees specified, as well as of the leaves of the juniper and the Scotch fir; occasionally, indeed, of those of the spruce-pine. Several kinds of lichens, especially the Usnea barbata, which grows in the greatest abundance on pine-trees and logs; also constitute a considerable portion of his food. To enable the elk to get at the sprigs of the aspen, the mountain-ash, etc., he depresses the larger branches with his head; but if the tree be of any height, and slender withal, he leans his breast against the stem, so as to bend it downwards, when, advancing step by step, he thus at length reaches the topmost boughs.

The dung of the elk varies in appearance according to the season of the year. In the summer it is somewhat loose, resembling in degree that of cattle; but in the winter it is hard, and in size and shape not unlike so many huge cob-nuts.

Where the animal has been reposing for a while, one often sees a shovel-full or two collected in a heap.

The rutting season with the elk, as with others of the deer tribe, is in the month of September and October. at this time utters a peculiar cry, supposed to be the Lockton. or call-note, with which he entices his mate. Ekström tells us, "It resembles a Smäll, or loud report, and is followed up by a snort like to that of a horse when alarmed, but much louder, and with a note as from a trombone. The Smäll is probably produced by his long and overhanging lips, and the snorting noise by the air being hastily and with force blown through his nostrils." Although just prior to the rutting season the males wander greatly in search of mates, yet as soon as they have found a partner, the pair retire together to a dense brake, generally consisting of fir or spruce, in the wildest recesses of the forest. Here the male forms a Grop, or cavity in the ground, which he very plentifully besprinkles with urine, and hence the term —— Grop. It is said that for some three weeks, during which the rutting season continues, the pair confine themselves to the immediate vicinity of this spot—to within a space, indeed, of some few feet in diameter, which spot, of their own accord, they will on no account desert; and even should they be scared from thence by people or dogs, they will, as soon as the pursuit has ceased, return to it again. Several pairs of elks are sometimes found near to the — Grop, the situation of which is frequently made known by the males scoring the small trees in the vicinity with their horns, or it may be twisting them in the manner of withes.

During the continuance of the rutting season the combats between the males are at times very desperate. They usually oppose antler to antler, but occasionally fling out like a horse. When attacked by dogs or wolves, they also use the heels, but the fore-feet would seem to be their principal weapon; and they direct the sharp hoof so adroitly as seldom to miss the object at which it is directed. The males are, at this season, somewhat savage and dangerous to approach; especially those that are driven from fair ones by more powerful rivals, and consequently necessitated to seek their fortunes elsewhere.

Such elks, it is averred, are not infrequently found amongst cattle, and have been actually known to pair with cows.

The period of gestation with the female is about nine months; she brings forth in May or June one to three young ones; but it is seldom she has more than two. After the lapse of two or three days, the fawns, which are of a light brown colour, follow their dam everywhere. They keep with her until the third year, when they are left to shift for themselves. She is a very affectionate mother, and at times defends her progeny with desperation. It is even said that if people approach the fawns when so young that they cannot flee from the impending danger, she will attack the intruders with fury; and that though she may have left them to their fate in the first instance, she has been known to return to the spot, and savagely to charge the enemy.

Independently of man, the elk has many enemies in the northern forests. The bear now and then pulls him down, and the lynx and the glutton prey upon the fawns; but the wolf is his worst foe. Though wolves are often beaten off by the elk, they destroy numbers of those animals. No later, indeed, than the winter before the last, and just before my arrival at Halgå Bruk in Wermeland, the remains of an elk only recently killed by these ferocious beasts, were brought to that place. They had seized the poor creature, which there was reason to believe had been long hunted by them, almost immediately after leaving its lair. Should the elk be wounded, and that the wolves come upon his bloody track-even though it be four or five days old—they are said never to leave it until they have made the deer their prize. The chase is, however, at times of long continuance. In one instance that came in degree under my personal observation, the elk must have run some fifty miles before he succumbed to his But the wolf occasionally pays dearly for his tempursuers. erity. Only two winters ago, when in quest of a bear in the Wermeland forests, my man, on his return from executing a commission at a distance, reported having seen by the way a quantity of blood and hair lying on the snow, from which he justly inferred a battle had recently taken place between wolves and an elk. Having other matters to attend to at the

moment I took no notice of the communication; but the circumstance being mentioned to another person, he forthwith repaired to the spot, near to which he found, not as he had anticipated, a dead deer, but a wolf; which, from the wounds and bruises about its body, it was clear, had been destroyed by the antlers or hoofs of an elk.

The elk can be readily domesticated. Several instances have come to my knowledge, where they, when brought up from a tender age, have become nearly as tame as the cattle with which they were not unfrequently allowed to consort and pasture. But I never heard of this animal being trained to harness, as formerly was often the case in Scandinavia. Some years ago I procured one of these domesticated elks, then three years old, for the late Earl of Derby. But during the short time that he was in my possession—whether owing to change of quarters or to unacquaintance with his keepers—he was not particularly tractable. At times, indeed, he would strike out with his fore-feet—his most formidable weapon—in a very vicious manner.

When the fawns are taken at an early age—and they are difficult of capture subsequently, for after the lapse of two or three days they make exceedingly good use of their legsthey may readily be reared by the hand. In the first instance they should be fed with milk fresh from the cow, or if that be not procurable, milk should be warmed up and administered either out of a horn or a spoon; afterwards, when they have acquired strength, they may be supplied with grass and leaves. It is on record that elk-fawns have been nurtured and brought up by a cow. But in this instance they had for some short time previously been fed by hand. "At first," says the President M. af Robson, "the cow showed reluctance to the fawns, but after a while her dislike was converted into a special affection, and she licked and caressed them with great fondness. The smallest of the fawns at once began to suck, and continues so to do until the present time. The larger one will not suck, but nevertheless closely follows her stepmother whenever she goes in a large enclosed pasture, and in the meanwhile it feeds on grass, and treats itself to leaves, especially those of the willow. Its evening repast consists of a bowl of meal, mixed up with milk and water, of which it partakes with much pleasure. When dogs approach, whether it be in the field or within the narrow enclosure or shed where they have their night quarters, the cow always defends them with courage and success. And she also evinces her displeasure when children or mischievous boys approach too near to her adopted offspring."

The elk is a valuable addition to the larder. Its flesh, whether fresh, salted, or smoked, is very palatable. Its skin is converted to a variety of purposes. In olden times soldiers' doublets were made of it. But old Chasseurs assure me that, singularly enough, if the animal has been much hunted, the skin becomes exceedingly thin and comparatively worthless. But a good skin is convertible to many purposes, and is very valuable; it has been said that when made into breeches a pair of them, among the peasantry of former days, went as a legacy for several generations.

## CHAPTER XXI.

Shooting the Elk in Skalls—An Elk Ringed—Breaking the Cordon—A Dead Shot—Hunting the Elk with a Dog—Difficult Work—Danger of losing the Dog—Standing at Bay—Shooting with the assistance of a Pointer—Hunting the Elk in Winter—A Chase of Four Days—Another very Long Run—Keeping well up—Broken Ice—Baulked—A Fresh Start—Perseverance—The Death—The Elk turning on his Pursuers.

In certain parts of Scandinavia many elks are shot in skalls. During the winter, and when there is snow upon the ground, so that the animals can be previously ringed, skalls, if well conducted, are generally successful. But those that take place in the summer time, on the contrary, owing to the locale of the deer being less certain, very frequently prove failures; such, at least, is the case in the Wermeland and Dalecarlian

forests. Great execution is, nevertheless, at times done in summer skaals, as evidenced in those under the command of the famous Andreas Schönberg, of which mention has already been made in this work. Only three or four years ago, indeed, M. Falk thus destroyed fourteen to fifteen elks in a single day; but then it must be borne in mind that one thousand or twelve hundred men took part in this hunt, which embraced a very great extent of country.

I myself never happened to be present at an elk skaal on a large scale; but at those in a small way I have seen that animal shot. A somewhat singular incident occurred to me on one of these occasions. We were a party of eight. elk was ringed, and, as luck would have it, the dimensions of the circle were small. Six of us were stationed at from one hundred and fifty to two hundred paces apart, and concealed ourselves behind trees or otherwise as best we might, whilst the other two were directed to start the animal and drive him Two shots were presently heard to the right of towards us. me, but as for a while afterwards all was still, I began to imagine the animal was either killed or had made his escape. At last, however, at some fifty paces' distance, and in rather thick cover, I caught sight of the elk as he was on the point of breaking the cordon. Though the snow was nearly three feet deep he was galloping, and his movements so silent, that my ears alone would never have made me aware of his presence. Having a double-barrelled gun ready cocked in my hand, I at once let fly right and left, though apparently without effect, for he speeded on his course as if nothing had happened. Being a tolerable shot in cover, the object aimed at large, and the range short, I was somewhat puzzled at this, and the more so, when shortly afterwards told by the man posted next to me, and exactly in the line of my fire, that I had missed the elk altogether, both of my balls having struck the snow near to where he stood. And this his assertion bore the semblance of truth, for on examining the track of the deer neither blood nor hair was to be seen. Nevertheless I had my doubts, and after our party had collected, we went in pursuit, and had not gone far when we perceived the poor creature prostrate, and at its last gasp. A fire was presently kindled, and the deer (large as a heifer) quickly flayed, when it was found that, independently of a ball which one of the party had lodged in his body prior to my firing, both of my balls, known by the greater apertures in the skin, instead of having missed the animal altogether as asserted, had not only taken effect in his broadside, but actually passed through and through his carcase, a discovery that at once explained the man's story as to the balls having dropped at his feet.

Though skalls are all very well, yet the chasse of the elk, as that of the bear, when a man is alone, so to speak, is a far more exciting and pleasurable amusement; and with the assistance of a good dog, it is not very difficult to kill those animals as well during the winter as the summer. The plan of operations, as concerns the dog, varies greatly in different districts. In the upper parts of Wermeland, and in certain districts of Norway, the system adopted is somewhat curious. With his well trained dog, in a long leash, the sportsman proceeds during the autumnal months to places which there is reason to suppose are frequented by the elk. Whilst traversing the forest, he halts occasionally, more especially on eminences, to give the dog the wind. This the intelligent animal seems perfectly to understand, for raising his head in the air, he snuffs the passing breeze. When, therefore, the dog has got scent of the elk-which I have seen him do from a very long distance—the man allows him, though still in the leash, to draw upon the animal, and follows after as quickly as he is able. When the dog has approached to within a short distance of the elk, he evinces, by his anxiety, that the deer is not far off. The man now proceeds with every deliberation That his movements may be effected with and caution. greater silence, he generally ties the dog-who is too well broke to give tongue in the absence of his master—to a tree or bush, and alone reconnoitres the surrounding country. Thus the man not unfrequently succeeds in getting a view of the elk, either whilst lying down or feeding, and of slaughtering him with his rifle; but much more frequently the elk, from his exquisite sense of smelling and of hearing, takes the alarm, and goes off at the top of his speed. The sportsman has now the same game to play over again; and thus he may

sometimes go on for days without succeeding in obtaining even a shot. This does not arise so much from the scarcity of elks as from their extreme shyness. It is not difficult to follow the same elk, even during the summer time, for a day or two together, for at that season he, for the most part, holds to the morasses and low grounds, where his track is in general perceptible. At times, however, one is thrown out, but on such occasions a good dog will generally enable the sportsman to retrieve the lost track. Hard blowing weather is the best for the purpose, as the noise made among the trees by the wind prevents the elk from hearing the approach of the hunter; the scent is then breast high, and the dog, in consequence, is enabled to take a man in a direct line up to the game. If it be calm, on the contrary, the dog cannot wind the elk from any considerable distance, and the latter, besides, is then able to hear the slightest noise. But when people are pursuing this sport, they must be careful not to allow the leash out of their hands, which is likely enough to occur owing to the eagerness of the dog. An old chasseur told me that a circumstance of this kind happened to himself; but though he searched the forest in every direction for many successive days, he was never able to find the poor animal, who had doubtless perished of hunger, in consequence of the leash getting entangled among the trees.

In other instances the dog is allowed to range at large. If properly trained, however, he should not open on the track of the elk, and not until he is immediately up with him. In that case the deer, taken by surprise, instead of fleeing, frequently stands at bay; and if the dog be high-couraged, and carries on his attack vigorously, the chances are that his master, if at all near to the spot, will have time to approach within range of the elk, and to put an end to his career. But if, on the contrary, the dog, when he first hits upon the trail, at once gives tongue, as is too often the case, the probability is, that the deer will take the alarm, and move off. From their superior courage, one has always the best chance of success with old male elks, and that more especially during the rutting season, at which time, as said, they are very savage. But high-couraged dogs, when thus in conflict, as it were, with the

elk, come badly off at times. Only two years since, indeed, I saw a dog brought down from the forest in a most cruelly mangled state; and though the poor creature eventually recovered, it is doubtful to me if he will ever be himself again.

"The elk," M. Greiff says, "may be readily shot with the assistance of a pointer." But this gentleman has left us in the dark as to the manner in which the feat is to be accomplished. The late President M. af Robson, who often accompanied M. Greiff on his sporting excursions, tells us, however, that it was done in this wise: "As soon as the dog got scent of the elks, he would draw very carefully, almost upon his belly indeed, towards them. During this time he would occasionally look back upon his master, who followed close behind, and this manœuvre was the oftener repeated, the nearer he approached When, therefore, his master was convinced that the deer. they could not be far distant, he would signal the dog to make a cast to one side. This the sagacious animal perfectly understood, and fetching a half circle in the same cautious manner as before, he, when sure that the elks were between himself and M. Grieff, would close upon them. They were generally lying on the ground; but on seeing the dog, they would get on to their legs and gaze at him attentively. And he in his turn would challenge to them every now and then. It seldom happened, however, that they were so much alarmed as to take to flight. So far from running away, indeed, they would in most instances show a bold front to the enemy, and either oppose him with their antlers, or strike at him with their forefeet, the most formidable of their weapons. In this while his master would stealthily approach the spot, and from the attention of the elks being altogether taken up with the dog, he was in most instances enabled to sight the animals before he himself was discovered. It was needful, however, so to place the ball that the deer fell dead on the spot, or at all events at no long distance, because the dog would not follow their tracks, but come creeping back as if to receive farther orders. These were generally that he should remain at the Valplats, or battle-field, where the elks often returned after a time in search, as it would seem, of their fallen companion, or they

halted again elsewhere in the forest, when the same manœuvre was repeated."

We have the saying in England, that great fiddlers are never good for much besides. But if there is truth in the story that was current in Dalecarlia, when I last visited that province, the best scrapers on cat-gut are, at all events, the most successful elk-shooters. How the idea was hit upon I am at a loss to divine; but it is affirmed that if a man places himself in ambush, and plays the violin (the particular tune I know not), the deer, if within hearing, will forthwith make up to the spot, when their doom is usually soon decided. During 1851, or 1852, however, a man in the parish of Wenjan, whilst adopting this expedient, was nearly forfeiting his own life. I could never get at the rights of the story; but it would seem that on the elks nearing the ambush where, instead of dulcet sounds, they were greeted very differently, they became so enraged as to make a furious charge at the unfortunate wight, and maltreated him to that degree with their hoofs and antlers, that it was with extreme difficulty he made good his retreat; and not altogether unscathed either, for his wounds were so severe as to confine him to bed for more than a month afterwards. The poor fiddler, himself, was unarmed; but he had two comrades in ambush at a little distance. Owing, however, to fright, or some hitch or other, the mischief was done, and the elks had retreated before the men came to the rescue.

The larger portion of elks slaughtered in Scandinavia are probably run down on Skidor in the winter—at times, with the assistance of dogs, which, if well trained, are of immense service; but just as often without their aid. If the snow be deep, and the surface sufficiently hard frozen to support the Skidor, but not the elk, the task is not a difficult one; for though it is true, that even under these favourable circumstances the chase may last a day or two, it more commonly is brought to a successful termination in the course of a few hours, or even much less. But should the snow, on the contrary, be in an unfavourable state, the pursuit may be of long continuance, and after all end in disappointment. This, on several occasions, has happened to myself. In one instance

two Finnar and I chased a small herd of elks for four consecutive days on skidor, and until they were evidently all but beaten. Had the frost continued, one or more of them would in all probability have become our prize; but unfortunately a rapid thaw set in, which compelled us to give up farther pursuit, and to face for home, from which we were then distant nearer thirty than twenty miles.

Even under the most discouraging circumstances, success has attended my endeavours. One April morning, for instance, I and a Finn started from Brunberget, in the Wermeland Finn-forests, and crossed the Dalecarlian frontier in search About noon we fell in with the stale tracks of two of those animals. It was a frosty day, and the snow, from there being a crust upon it, in favourable order for the The deer had taken an easterly course, and from the tracks being very tortuous, we were led many and many a weary mile; but as the tracks became fresher and fresher as we advanced, we pushed on with the greater ardour. Evening, nevertheless, closed in upon us before we could come up with the animals; and we therefore prepared a bivouac in the usual manner. The weather was fine, and, though without other covering than the clothes we wore, which were scanty enough, the night was passed with tolerable comfort. As, however, at that season of the year the hours of darkness were few, our rest was not a very lengthened one, and on the following morning, at an early hour, we were again following the tracks. But it must have been seven or eight o'clock before we succeeded in starting the deer, which was on a pretty lofty and deeply-wooded eminence to the eastward of the considerable river, Westra Dal-Elfven, that empties itself into the Bothnian Gulf, near to the town of Gefle. The dogs were now slipped, and chase given at our best pace, which was by no means a slow one. The deer, when first started, doubled more than once, which somewhat puzzled both us and the dogs; but after a time they separated, and took opposite directions. We pursued the track of the larger one, which, for a time kept a pretty straight course. Hill and valley were traversed in turn, and neither broken ground nor dense brakes stopped our progress.

The run had not been of any very long continuance, however, when I received, as I imagined, a severe blow on the back of my right leg, accompanied by a report as loud at least as the explosion of a copper cap. Turning round on the instant, I found that, instead of a blow, as I at first supposed, one of the tendons of my right leg had snapped, and excessive lameness immediately ensued. I was naturally in great tribulation, conceiving it all over with me, not only for that day but for many to come. In this matter, however, I was in error; for as the forward movement, when one is on skidor, is made with the left foot, the right being merely drawn after it, I managed, though in pain, to hobble forwards tolerably well.

For a time the dogs kept well with the elk; and from hearing their challenges every now and then in the distance, we were enabled to make many a short cut, and thus to gain on him considerably. Once whilst crossing a large lake, divested in great degree of snow, the deer, as we observed by his tracks, had slipped on the glassy surface, and fallen heavily; but the tumble seemed in no way to have injured him, for he had picked himself up again, and speeded on his way as if nothing had happened. In spite of our best exertions, it was long past mid-day before we sighted the deer on an open morass, as he was crossing a frozen brook; but the ice gave way beneath his weight, and he was instantly plunged into the water. In a few seconds afterwards, however, he landed on the opposite bank, apparently none the worse for his bath, and continued his course.

Later in the day we rested awhile, and then renewed the chase. But our strength and spirits had by this time somewhat flagged, so that we could no longer proceed with the same speed as in the morning. The deer also evinced symptoms of weariness; but though we did not see him more that day, we were close upon him more than once. This we knew by the dogs, who ever and anon started him from brakes, where fatigue had caused him to make temporary halts.

Pretty late in the afternoon the chase led us back to the Dal, the river we had crossed in the morning, though at a considerable distance farther to the northward. Here the

stream was dead and sluggish, and the ice so thick, that all the artillery in the world might have crossed with impunity. A little above this point there was a succession of rapids, also partially frozen over. Everywhere the ice stretched out from the land far into the stream, and in some places spanned it altogether. But as the water had fallen considerably since the commencement of the winter, a vacuum of a foot or two was left between it and the ice, which thus formed a suspension bridge, so to speak. There were, however, many and large openings in the middle of the river, where the strong current rolling over its rocky bed was visible to the eye. Thirsting, perhaps, and desirous of laving its fevered body, the deer had taken to the water at the lower part of the rapids, and, as we saw by his tracks, followed them up for a long distance. How he managed to make his way over the several ice bridges spoken of, more than one of which had broken down under his weight, and had thus caused his immersion in the stream, quite puzzled my comprehension. In some places from the shoalness of the water, his long legs had, no doubt, enabled him to wade; but in others, it was quite evident he had been obliged to have recourse to swimming. Whilst we were thus pursuing his tracks amongst the ice and broken water, I, for my part, expected every moment to find him imprisoned in some hole or other, or that the stream had carried him bodily under the overhanging ice, and that consequently he had perished. But nothing of the kind; for it presently appeared that, after enjoying his bath, which had, no doubt, greatly tended to invigorate and refresh him, and that he had nearly reached the smooth water above the rapids, he had diverged to the left from the river, and again betaken himself to the forest. This night we also passed in the open air; and as our fire burned bright, and the cold was not great, we had no reason to complain of our quarters.

Hitherto the weather had been fine and frosty; and had this favourable state of things continued, there was every prospect of our being enabled on the morrow to give a good account of the elk, which was evidently greatly wearied and exhausted. To our extreme annoyance, however, we found on awakening at daybreak, that a rapid thaw had set in, and

that in every way told against us; for there was no longer, as heretofore, a crust on the surface of the snow, which, whilst it greatly facilitated the movements of ourselves and the dogs, retarded in the same proportion those of the deer; and we therefore considered the chance of success as ten to one against us. But remembering the old Swedish proverb, "Tâlamod öfvervinner surkâl"—literally, patience overcomes sourcrout—we determined to persevere; and after enjoying a cup of strong coffee (the greatest of all luxuries when one is roughing it in the forest), we again started off, on what was then considered an almost hopeless pursuit.

Coupling the dogs, we at first quietly followed on the tracks of the deer for the purpose of ringing him, which object was effected on an elevated knoll at no great distance from the Before starting an elk, it is always desirable to adopt this course, for, knowing his whereabouts, one has then a better chance of stealing upon the animal whilst in his lair, or whilst feeding. In this instance, however, our endeavour to circumvent the deer proved unsuccessful; for before we could approach to within anything like gunshot of his lair, he had taken the alarm and decamped. Nothing now remained for us but to slip the dogs, and to follow on the tracks of the deer, and trust to the chapter of accidents: but owing to the unfavourable state of the snow, our best pace was a most sorry one. We were greatly out of heart, and the dogs sadly tired. from their exertions on the preceding day; and though they did their utmost, they were unable, for some time at least, to close with the elk.

Thus we continued to drag ourselves forward until long after noon, when, just as we had reached the brow of a pretty lofty and deeply-wooded knoll, the dogs were heard challenging in the valley beneath us. At first we imagined it was a bear they had fallen in with, and hastened to their assistance, but on reaching the spot, it was found to be the elk we had so long chased. He was standing nearly hock deep in the snow, and so completely exhausted, as not only to be unable to advance another step, but unresistingly to allow the dogs to pluck the long hair from his hind-quarters. He was so fairly beaten, indeed, that it is my firm impression a halter might

with facility have been placed about his neck. A bullet that I sent through his head, soon put a period to his miseries and his life.

We now got up a fire, and set to work flaying and dismembering the deer, which occupied a considerable time. Subsequently, and as a protection from the wolves and the weather, we placed the skin and the meat en cache, and then made our way to the nearest habitation, distant several miles, where we arrived two or three hours after dark; and though bivouacking is all very well in its way, I was not sorry, I must confess, after the fatigue we had undergone, to turn into something like a bed, and to have the shelter of a friendly roof.

During the rutting season, as said, the elk is somewhat savage, and occasionally attacks people. When chased at other seasons of the year he has also been known to turn on his pursuers.

During the winter of 1850-51—and the incident occurred in the immediate vicinity of where I was then sojourning-a Dalecarlian chasseur was in great jeopardy from an elk. company with two other persons he had long pursued a huge male, which, tired out by the length of the chase, and the great depth of snow, finally betook himself to Glynnsjön, a fine lake in Western Dalecarlia, then firmly frozen over, where the men for the first time viewed the animal. From the ice being but thinly coated with snow, the elk was here enabled to go at its own pace, and, consequently, had the best of his pursuers; and finding this to be the case, he doubled backwards and forwards on the lake, and would not for a long time leave the vantage ground. During this time the party, which from some cause or other only possessed a single gun, fired several times at the deer. And though at the second discharge the piece burst near to the muzzle-of which some six to eight inches were carried clean away—other discharges, and with good effect, were subsequently made with the stump of the barrel. At length, however, the men succeeded in driving the animal from off the lake, when he again betook himself to the forest. Here the chase was continued, but all at once, and in pretty close cover, the elk wheeled suddenly about, and retracing

his own tracks, which the men were following, made a desperate rush at the headmost—who was somewhat in advance of his comrades, and who, from being encumbered with skidor, was unable to get out of his way—and instantly knocked him over. Happily for the poor fellow, the infuriated animal, owing to wounds and exhaustion, fell at the same time along-side of him; when the man not being seriously injured, after a while was enabled to rise on his knees, and, with great presence of mind, with his left hand seizing hold of one of the long pendent ears of the deer, and drawing forth his knife with his right, succeeded, after a desperate struggle, in cutting the throat of his antagonist.

## CHAPTER XXII.

The Wolf in Sweden and Norway—A Surprise—The Wolf's Glen—Pursuing Dogs—Varieties—Size and Appearance—Under Domestication—Its Prey—Manner of Attack—Ferocity—Destructive to Human Beings—Touching Incidents—Numbers Increasing—An Unsuccessful Skall.

THERE were a good many wolves in all this part of the country. Once, when my Irish servant was beating a little and deeply-wooded hollow on the face of a hill for black game, a wolf suddenly started out of a brake and went off at an awkward gallop. At this time he was at about forty paces distance, but his hind-quarters were towards me, so that, though I sent a shot after him, it had no other effect than to cause him to quicken his pace. We followed in the direction he had taken, and presently came to a wild and sequestered glen, the bottom of it being strewed with large fragments of rock which had tumbled down from the sides of the adjacent crags; but this we had hardly begun to explore when either the same or another large wolf sprang up almost under the feet of my man, whose shouts, as he sent his shillelagh (the only weapon he had in his hand) after the animal, I shall never

forget, when he went off at the top of his speed. Unfortunately at this time I was on the heights above, and at about thirty paces distance from the wolf. As he was fully exposed to my view, however, when he sprang from his den I instantly fired, and peppered his sides with the contents of both my barrels; but, as in the former instance, I had only small shot, it had no more effect than if I had fired against a brick wall. Had my gun been loaded on this occasion with either slugs or bullets, I have little doubt but I should have killed the beast. From certain indications that we saw in this sequestered dell, we had more than reason to suppose it had long been a favourite resort of those dangerous animals. We therefore named it Wolf's Glen. Subsequently we paid it several visits, but we were never again fortunate enough to fall in with another of them.

Though the wolf is vulgarly considered to be a very terrific animal, his cowardice (unless when he is congregated in droves) has been years ago detected by those keen inquirers, the poets. Cowley, speaking of him, says:

"Such rage inflames the wolf's wild heart and eyes,
Robb'd, as he thinks, unjustly of his prize;
Whom unawares the shepherd spies, and draws
The bleating lamb from out his ravenous jaws.
The shepherd fain himself he would assail,
But fear above his hunger does prevail:
He knows his foe 's too strong, and must be gone;
He grins as he looks back, and howls as he goes on."

On two other occasions, when I have been wandering in this part of the country, the wolves were seen, it was said, running the tracks of my dogs, like so many hounds, from the large woods where I had been shooting. From having come but little in contact with wolves during my stay in Scandinavia, it is not in my power to offer information that is likely to be either novel or interesting regarding those beasts. This, indeed, under any circumstances would be almost impossible, as the natural history of the wolf is perhaps as well understood as that of most animals in the creation.

It is imagined by many that only the common wolf is a native of Scandinavia, but Mr. Nilsson seems almost to think the black wolf, which is to be found in some of the northern-

nost parts of Asia and Europe, is indigenous to that peninsula. Dr. Högberg, a respectable medical practitioner at Carlstad, says, that "in the year 1801, five black wolves were destroyed in the province of Wermeland; with the exception of a white streak on the breast, these were of a jet black colour, and though something smaller, they exactly resembled the common wolf in appearance. The skins of these animals were very handsome, and sold for three or four times as much as they would have done had they been of the ordinary description." White wolves are also sometimes met with, but the Professor decidedly says these are only Albino varieties of the common species.

The Scandinavian wolf grows to a great size, as he measures four feet from the top of the nose to the insertion of the tail; the latter is about one foot and a half in length; he is from two feet and a half to nearly three feet in height. The female has a more pointed head than the male, and also a smaller tail. In appearance the wolf has some resemblance to a dog; his size, however, is generally superior, his legs longer, and his body more robust and muscular; his ears, besides, are pointed and erect, and his eyes, which are of a green-yellow colour, are smaller, and placed in a more oblique position than is the case with that animal, which gives him a peculiarly treacherous look. His internal structure is perfectly analogous to that of the dog. His colour is usually dark grey, mixed with black, though this varies a little according to the age of the animal, as well as to the season of the year.

Though the wolf bears a considerable similitude to the fox, he nevertheless differs in many essential particulars from that animal. Among other distinguishing marks he has a thicker and less pointed nose; the pupil of his eye is circular, whereas in the fox it is vertically oblong; he hangs his tail, which is bushy, between his legs, whilst the fox, on the contrary, carries it straight out; he never burrows in the ground, which the fox is in the habit of doing; and lastly, his smell is not offensive as is the case with that animal.

"The female wolf carries her young," according to Mr. Nilsson, "for ten weeks, and brings forth, in the end of the month of April or May, from three to nine whelps. If the

mother be young, she has fewer than if more advanced in years. The whelps are blind for the first ten days, and do not attain to their full growth until their second or third year. "If you put the whelp of a wolf to a bitch," that author observes, "he becomes quite tame, and docile as a dog. In that case he barks like one of those animals."

The wolf may be easily domesticated. Mr. Greiff says, "I reared up two young wolves until they were full grown. They were male and female. The latter became so tame that she played with me, and licked my hands, and I had her often with me in the sledge in winter. Once when I was absent, she got loose from the chain she was bound with, and was away three days. When I returned home, I went out on a hill and called, 'Where is my Tussa?' as she was named, when she immediately came home, and fondled with me like the most friendly dog. She could not bear other people; but the dog, on the contrary, was friendly with others, but not with me, from the moment when he once seized a hen, and I whipped him with a courier whip. As they were well-treated, they became very large, and had fine skins, when they were shot in the month of January."

The sense of smelling possessed by the wolf is peculiarly strong: he can wind his prey from a very considerable distance. He runs the foot of the animal he is in pursuit of in the same manner as a dog. The track of the wolf much resembles that of a large dog—but it is rather longer in proportion to its breadth. The two middle toes, however, are closer together, and the side ones more separated, than in that animal. The ball of his foot, which is of the shape of a heart, is farther removed from the toes than is the case with the dog. When the wolf is walking he places his hind-foot in the track of the fore-foot; when trotting, three or four inches in advance of it. If there be several wolves, they often follow so exactly on each other's track, that it is not always easy to distinguish if there was more than one.

Between the dog and the wolf there is a natural enmity, and those animals seldom encounter each other, on at all equal terms, without a combat taking place. Should the wolf prove victorious, he devours his adversary; but if the contrary

be the case, the dog leaves untouched the carcase of his antagonist. This feeling of ill-will, however, does not exist to the same degree between the opposite sexes of those animals. Indeed, it is a well-known fact, that a connection is often formed between them. The produce, according to Mr. Nilsson, are stronger and higher couraged than other dogs. This intermediate species, that gentleman states, are capable of propagating among themselves and with other dogs. This statement, if correct, as I presume it to be, decides the question on which some speculation has taken place as to the dog and the wolf belonging to the same species.

The wolf usually remains in his den during the day-time; but as the shades of evening set in, he sallies forth and roams the country in search of prey. He feasts on every description of animals, from the smallest to the largest, common to the Scandinavian forests. The rat, the hare, the fox, the badger, the roebuck, the stag, the reindeer, and the elk. Even the bear himself, as I have shown, once now and then becomes his victim. He devours likewise birds, such as the ripa, black-cock, and the capercali. When in the last extremity of hunger, it is said he will even eat moss, wood, clay, and other unnatural food. He destroys, as it is well-known, every kind of domestic animal; but horses at times successfully repel his attacks. In Scandinavia, indeed, one often sees horses deeply scarred in consequence of wounds they have received from this ferocious animal.

The Scandinavian wolf is naturally timid. His courage is not equal to his strength, for when not in want of food, he is frightened at the smallest noise. Indeed, according to Mr. Nilsson, at such times he will not venture to attack a sheep, or other animal that wears a bell about his neck. Hunger, however, makes him bold. In the summer-time, the wolf usually confines himself to the wildest recesses of the forest. At that season of the year he is little destructive to domestic animals; but when all nature is fast bound in the iron chains of winter, these animals assemble in droves, and descending from their mountain fastnesses, fall down into the more open parts of the country, and attack and kill every living creature.

Thus they prowl over extended plains, and at such times,

when famished with hunger, they occasionally utter the most dismal howlings; such I once heard in the distance, and certainly a more terrific sound has seldom reached my ears.

"By wintry famine roused, from all the track Of horrid mountains, which the shining Alps, And wavy Apennine, and Pyrenees, Branch out, stupendous, into distant lands, Cruel as death, and hungry as the grave, Burning for blood, bony, and gaunt, and grim, Assembling wolves in raging troops descend, Keen as the north wind sweeps the glossy snow:—All is their prize."

The wolf is said always to seize his prey by the throat; and when it happens to be a large animal, such as the elk, the latter often drags his murderer for a considerable distance, until, from exhaustion, he falls to the ground. "The wolf," according to Mr. Nilsson, "after tearing out the entrails of his victim, devours, in the first instance, the vital or more noble parts, such as the heart, lungs, and liver." He is possessed of great strength, especially in the muscles of his neck and jaws; he can carry a sheep in his mouth, and easily run off with it in that manner. His bite is cruel and deadly, and so keen that he usually brings away with him the piece of flesh into which he has fastened his fangs. Indeed, I heard of an instance where he deeply indented an iron shovel, that was opposed to him, with his teeth.

After a deep fall of snow the wolf is unusually ferocious. In the forest, little danger is to be apprehended, by the concurrent testimony of every one, from those animals, unless they be congregated in very considerable numbers. In such situations they seem to dread an ambuscade, for they almost always fly at the sight of man. On extended plains, or on the surface of lakes, however, the wolf is often very bold. Hereafter, indeed, I shall have occasion to relate several anecdotes showing the daring manner in which his attacks are sometimes conducted. If the wolf besmears himself with the blood of his victim, or if, whilst engaged in combat with one of his own species, or another animal, he is so wounded that the blood flows, it is positively asserted that his companion will instantly kill and devour him.

Wolves not unfrequently destroy people in Scandinavia. Many lamentable instances of the kind have occurred within the last few years. Wolves that have once tasted human flesh are said to be more dangerous than others. In the year 1819 those ferocious animals killed no less than nineteen persons in a very confined district of country. This was at no great distance from Gefle, situated on the shores of the Gulf of Bothnia. The poor sufferers were, however, almost all children. It was supposed to have been the same drove of wolves that committed this dreadful devastation.

"Wolves," Mr. Nilsson says, "only attack the human race when dying of famine." He farther observes, "that in those parts of the country where they abound, it has often happened, even in the day-time, that they have suddenly come to houses, and killed and carried away children that were alone." The following circumstance, related to me by Captain Eurenius, will go far to corroborate the latter statement. The occurrence took place in the vicinity of Frederickshall, in Norway, near to which place that individual was then residing.

A peasant was one day looking out of his cottage-window, when he espied a large wolf enter his premises, and seize hold of one of his goats. At this time he had a child of about eighteen months old in his arms; this he incautiously laid down in a small porch fronting his house; when catching hold of a stick, the nearest weapon at hand, he attacked the wolf, who was in the act of carrying off the goat. The ferocious animal now dropped the latter, but getting a sight of the child, almost in a twinkling of an eye, he seized hold of the little innocent, threw it across his shoulders, and was off like lightning. The poor father was driven almost distracted at this horrible sight; but his sorrow was unavailing, for he was unable to overtake the wolf, who, together with his prey, quickly disappeared in an adjoining thicket. Though, for some days subsequent to this catastrophe, numbers of people, and Captain Eurenius among the rest, searched the surrounding forests, not a vestige was to be seen of the poor babe who had thus untimely met its fate. Several other children, Captain Eurenius stated, had been destroyed by wolves about the same period, and in the same line of country.

Though the Scandinavian wolf is sufficiently ferocious, it would seem that his nature is less bloodthirsty than others of his species common to the more southern parts of Europe; for, in France, Spain, and other countries, wolves, it is well known, often attack people even when not instigated by hunger. Indeed, a friend of mine, the Chevalier Lopez Da Cunha, Secretary of Legation to the Court of Russia, in whose company I once traversed a part of Lapland, assures me that in certain districts of his native country, Portugal, the wolves are so daring in their attacks, that travellers are often obliged to be provided with an escort. Though bears have of late years become very scarce in Sweden, wolves on the contrary, are supposed to have increased. Mr. Greiff thinks this has been the case since the cessation of the great skalls in the time of Frederick the First.

"It has been observed in Halland," Mr. Nilsson says, "that since wolves have become more numerous, foxes have decreased." The wolf destroys great numbers of those animals. The chase has been described to me as very amusing. If it be on an extended plain, or the surface of a lake when frozen, the superior speed of the wolf generally enables him to overtake the fox; but should the latter once reach the shelter of the forest, his greater quickness and adroitness in turning among the trees commonly insures his safety.

Wolves are destroyed by a variety of ways in Sweden: by traps of various construction, pitfalls, and poison; great numbers are also killed in skalls. When these take place in the summer season, they are usually conducted in much the same manner as those for bears.

Some few years prior to my first visiting Wermeland, the wolves committed very great ravages in the more southern parts of that province. A skall in consequence took place, at which I understood near two thousand persons took part. It lasted for two, if not for three days. It was very judiciously planned, for the people, forming a vast semicircle, drove the country before them to a peninsula stretching into the Wenern. It was now thought that a good many wolves would have been killed, for it was known that a number of those animals were enclosed within the cordon. On the people, however,

reaching the extreme point of the peninsula, to their great mortification, neither wolf nor other beast of prey was to be seen, and in consequence the skall dispersed. But the mystery was subsequently explained; for, some time afterwards, a drove of about thirty wolves was seen crossing from a small island situated in the Wenern, where it appeared they had sheltered themselves when driven from the mainland.

## CHAPTER XXIII.

Wolves particularly partial to Dogs—Plundering the Farm-Yards—Desperate Conflict with a Wolf—Wolves and Foxes caught in Traps—Narrow Escape in the Forest—A Wolf seizing a Pig—A Soldier devoured by Wolves—Amusing style of Shooting Wolves—Not always successful—A Good Start—Wolves devouring their own dead—Dangerous Termination—Another unlucky Expedition—Interesting Incidents.

WOLVES are said to be particularly partial to dogs. those animals usually picked up every one that was at large in this part of the country. Several were taken from both Risäter and Uddeholm. Caresse was the drawing-room pet at the latter mansion, and was as fat and as sleek as a mole; but happening to be star-gazing one evening, just outside the door, a famished wolf whipped her up in his horrid jaws, and was instantly across the lake with her. Unless along with me in the forest, I rarely allowed my own dogs to be slipped from their couplings at this season of the year. This precaution was very necessary, as it not unfrequently happened that the wolves were in the immediate vicinity of Lapp Cottage. Once, indeed, a small drove, as I saw by their tracks, passed within ten paces of my dog-kennel. On another occasion, a single wolf posted himself, in the middle of the day, within about fifty paces of the house; but only females were at home, and he therefore went off unmolested.

Wolves were not often to be seen during the winter period

of the year in the wilds of the forest, their common resort being in the vicinity of villages and roads. Here they occasionally got hold of a stray pig or goat; but in the northern parts of Wermeland they were less destructive than in the more southern districts of Sweden. This was owing to the cattle thereabouts being universally housed during the whole of the winter months. Once now and then, however, the wolves made an attack upon domestic animals even when under cover. An instance of the kind took place in the vicinity of Uddeholm, a few days before I first visited that part of the country. The circumstance was as follows:--A peasant, whose name I forget, had just turned into his bed for the night, when suddenly his ears were assailed by a most tremendous uproar in his cattle-shed. On hearing the noise he jumped up, and though almost in a state of nudity, he proceeded into the building to see what was the matter; but the mystery was soon explained, for he quickly made out the unwelcome visitor to be an immense wolf. This he gallantly seized by the ears, and, at the same time, called out most lustily for assistance. His wife now came to his aid, but though she was armed with a hatchet, with which she kept chopping away at the wolf's head it was a long time before she could succeed in dispatching him. Indeed, it was said she only effected this at last by driving the handle of the hatchet down the throat of the beast. The skin of this animal subsequently came into my possession, but it was much injured from cuts. During this rather arduous conflict the poor man's hands and wrists were bitten through and through by the wolf; when I saw him, in fact, a short time subsequently, the wounds had not entirely healed. Before this marauder was destroyed he had slaughtered four goats, and would, probably, have killed the remainder of the poor creatures that were confined in the building had he been left to himself a short time longer.

Wolves were occasionally caught by traps in the vicinity of my quarters. They were also not unfrequently taken in pitfalls, consisting of circular holes about twelve feet in depth and diameter. In their centres strong upright posts were affixed, which came up even with the surface of the ground. On the top of these posts a small platform of fifteen or eighteen inches square was placed; when the trap was set, therefore, a chicken, duck, or small dog, was fastened alive on the platform; a few twigs were now placed over the open space, and subsequently they were covered with straw, a great deal of which was scattered about, so that nothing in the slightest degree suspicious met the eye. If any animal, therefore, attempted to lay hold of the bait, he instantly tumbled headlong into the pit, from whence, from its depth, escape was next to impossible.

I once saw a wolf lying at the bottom of a pitfall. The poor creature had been a prisoner for more than a day, and was in a most pitiable condition; in appearance he was more dead than alive. Every one said he was only shamming, and that if he were once to reach terra firma he would go off like lightning; but I am inclined to think he was suffering from the combined effects of cold and starvation. We could not get him to move; indeed, a man was obliged to descend into the pit and absolutely to lay hold of him before he would get on his legs; but his spirit was so completely gone that he did not offer the slightest resistance. I presently, however, put a period to his miseries by sending a ball through his head. Mr. Falk had a pitfall at Risäter, in which, at one period, he caught a good many wolves; but within the last two or three years he had taken very few of these animals.

Foxes are very frequently taken by this contrivance. I heard an instance of the kind which was attended with rather a ludicrous result. One of those animals was lying at the bottom of the pit, when a man, with the assistance of a ladder, was in the act of descending for the purpose of destroying it; the fox, however, thought he might benefit by the convenience as well as his assailant, so, just as the man reached the ground, the fox sprang on to his shoulders, and then out of the pit in an instant. Prior to that period this particular pitfall had always been a very successful one; but for a long time subsequently not a fox was caught in it. Numbers of these animals were traced on the snow to its brink; but the wary old gentleman whose adventures I have just related had probably given the fraternity a hint.

When I was at Gefle three or four years ago I met with much politeness and attention from Mr. Garberg, who was resident at that place. That gentleman had a very pretty cottage near to the town, where he usually spent the summer months. Here, as he was very fond of sporting, he kept a good many dogs. One day however, in the winter time, the kennel-door was accidentally left open, when the wolves, which were very numerous thereabouts, quickly picked up four out of the six that were confined in the building. Mr. Garberg stated farther, that the wolves during the winter I speak of had killed two dogs in the town of Gefle itself, and that within a short distance of his own house. He told me, likewise, that a winter or two before, whilst a man was working in the forest, within a few miles of Gefle, he was attacked and desperately wounded by several wolves. His companion, who was at some little distance, on hearing his cries, immediately ran to his assistance, and with his axe fortunately succeeded in beating off the ferocious animals. He then took the wounded man on his back, and was conveying him to a place of safety; but after a while fatigue obliged him to set down his burthen. This he had hardly done when the wolves came on again more furiously than before, and it was not until he had cut down several of them that he succeeded in driving away the remainder. He then once more took up his wounded companion, whose life he had twice saved by his gallantry, and fortunately succeeded in conveying him to a place of safety. Though the poor man was terribly mauled by the wolves, he finally recovered from his wounds.

Wolves are very fond of swine, and generally attack those animals if they be at large during the winter. Lieutenant Oldenburg once witnessed a circumstance of this nature. He was standing near to the margin of a large lake, which at the time was frozen over. At some little distance from the land a small aperture had been made in the ice for the purpose of procuring water; at this hole a pig was drinking. Whilst looking towards the horizon, Lieutenant Oldenburg saw a mere speck, or ball, as it were, moving rapidly along the ice; presently, however, this increased considerably in size, and

he then discovered it to be a wolf, which was making for the pig at top speed. He now seized his gun, which was immediately at hand, when he ran to the assistance of the pig; but before he got up to the spot the wolf had closed with the poor animal, which, though of a large size, he tumbled over and over in a trice; the wolf, however, was so agreeably occupied with his prize that he allowed Lieutenant Oldenburg to approach within a few paces of him; that gentleman then fired, and so desperately wounded the beast in the body that, though he went off for the moment, he was presently enabled to come up with him a second time and despatch him. pig was still alive, though the wolf had torn a piece of flesh us large as a man's foot (I use his own words) out of its hindquarters; but the poor creature was so terribly frightened that it followed him home like a dog, and would not leave his heels for a moment.

Lieutenant Oldenburg related another anecdote which came under his immediate notice. The circumstance happened in Norrland. A boy, only eleven years of age, was one day standing at his father's door, when he espied a large wolf seated on the ground at a small distance. The gallant little fellow now ran into the house and seized hold of his father's gun, which fortunately happened to be loaded at the time; with this he advanced to within a few paces of the wolf, who either from contempt of his antagonist or from intending to make a meal of him, remained stationary, when he shot him through the head.

Mr. Herman Forsslöf, the incumbent of the parish of Gustaf-Adolph, related to me the following anecdote regarding wolves. The circumstance took place many years ago in the parish of Arsunda, in Gestrickland, of which province Mr. Forsslöf was a native. Whilst a poor soldier was one day crossing a large lake called Stor-sjön, it then being the depth of winter, he was attacked by a drove of wolves. He was armed only with a sword, but with this weapon he defended himself so gallantly that he not only either killed or wounded several of his assailants, but he succeeded in driving off the remainder. Some short time afterwards, however, the same drove of wolves again beset him; but he was now unable to extricate

himself from his perilous situation in the same manner as before, for when he laid his hand upon his sabre and attempted to draw it he found it firmly frozen into the scabbard. This was in consequence of his having neglected to wipe the blood from the blade after the desperate conflict in which he had been engaged. It is almost needless to add that, as he was then defenceless, the ferocious beasts quickly killed and devoured him.

As usually happens when the weather is severe, the wolves became rather troublesome; and I heard of their committing many depredations in different parts of the surrounding country: for this reason, I went on one or two little expeditions, under the idea that I might be enabled to destroy some of those voracious animals. Wolves are very partial to a pig. My plan of proceeding, therefore, was this: I caused one of these animals of a small size to be sewed up in a sack, with the exception of his snout; and I then placed him in my sledge. To the back of this vehicle I fastened a rope of about fifty feet in length, to the extreme end of which was attached a small bundle of straw, covered with a black sheepskin; this, when the sledge was in motion, dangled about in such a manner as to be a good representation of the pig. Thus prepared, I drove in the night-time through such districts as were known to be frequented by wolves. To attract these animals towards us, we kept occasionally pinching the poor pig, who, not liking this treatment, made the forest ring again with his squeaks. This plan of shooting wolves with the assistance of a pig is not very unfrequently resorted to in Scandinavia when the weather is severe. If those dangerous animals happen to hear the cries of a pig, it is said they almost always approach immediately near to the sledge, when it is not, of course, difficult to kill them.

All my expeditions, however, proved unsuccessful; for, owing to the wandering habits of the wolves, I was never able to fall in with them. On some of these occasions, I have suffered a good deal from cold; as, from the necessity that existed of being always ready for action, it did not answer to be hampered with too much clothing. My poor pig, I remember, had once his ears so hard frozen, that they might almost

have been broken off in the same manner as so much glass. I once tried this plan near to the north-western shores of the Wenern, in a district called Näs, where a large drove of wolves had recently committed great devastation; but though I traversed the country and inlets of the Wenern itself, which were frozen over, for nearly two whole nights, I was not fortunate enough to meet with these marauders. About a week prior to this time, a peasant, on his return home from Amal one evening, tied his horse up to his door whilst he carried the harness within the house. At this moment a number of wolves made their appearance, when the frightened animal broke his bridle, and ran off at the top of his speed; but the wolves gave chase to the horse, and soon succeeded in coming up with him in the forest, when they quickly destroyed him.

During my excursion, I visited the spot where the poor animal met his doom, but, with the exception of a bone or two that were strewed about, not a vestige of the carcase was to be seen, the wolves having by this time devoured the whole of it. There was some blood on the snow, which was trodden down in the vicinity, in the same manner as if it had been gone over by a flock of sheep.

Though I was generally quite alone, with the exception of my driver, during these expeditions, I do not apprehend I ran much personal risk; the greatest danger was from the horse proving unsteady, in the event of the wolves making their appearance. In that case, the sledge would not improbably have been overturned, when I, in consequence, might have been left to my fate. From the wolves themselves, under other circumstances, I entertained little apprehension, as I was usually armed with a good cutlass, and more than one gun.

It is said, that people have incurred some jeopardy when on these expeditions. The following anecdote was related to me by Mr. Garberg, at Gefle. Of the truth of the story, which occurred near to that place, that gentleman did not seem to entertain a doubt. About twenty years ago, during a very severe winter, and when there were known to be many wolves roaming about the country, a Captain Nordenalder, together

with several companions, started off on an excursion similar to those I have been describing. The party were provided with a large sledge, such as are used in Sweden to convey coke to the furnaces, a pig, and an ample supply of guns and They drove on to a great piece of water, which ammunition. was then frozen over, in the vicinity of Forsbacka, and at no great distance from the town of Gefle. Here they began to pinch the ears of the pig, who of course squeaked out tremendously. This, as they anticipated, soon drew a multitude of famished wolves about their sledge. When these had approached within range, the party opened a fire upon them, and destroyed or mutilated several of the number. All the animals that were either killed or wounded, were quickly torn to pieces and devoured by their companions. This, as I have observed, is said invariably to be the case, if there be many congregated together. The blood with which the ravenous beasts had now glutted themselves, instead of satiating their hunger, only served to make them more savage and ferocious than before; for, in spite of the fire kept up by the party, they advanced close up to the sledge, with the apparent intention of making an instant attack. To preserve their lives, therefore, the Captain and his friends threw the pig on to the ice; this, which was quickly devoured by the wolves, had the effect for the moment of diverting their fury to another object. Whilst this was going forward, the horse, driven to desperation by the near approach of the ferocious animals, struggled and plunged so violently, that he broke the shafts to pieces. Being thus disengaged from the vehicle, the poor animal galloped off, and, as the story goes, succeeded in making good his escape.

When the pig was devoured, which was probably hardly the work of a minute, the wolves again threatened to attack the party, and as the destruction of a few out of so immense a drove as was then assembled only served to render the survivors more blood-thirsty, the Captain and his friends now turned their sledge bottom up, and thus took refuge beneath its friendly shelter. In this situation, it is said, they remained for many hours, the wolves in that while making repeated attempts to get at them by tearing the sledge with their

teeth; but at length assistance arrived, and they were then, to their great joy, relieved from their most perilous situation.

Captain Eurenius, when he was quite a boy, in company with a brother who was younger than himself, once went on a similar expedition to those of which I have been speaking. It was in the depth of winter, the cold at the time being very severe, when these striplings proceeded in their sledge to an inlet of the Wenern, which was then sheeted with ice, and which was known to be much frequented by wolves. had a pig along with them as usual, who, by the application of a corking-pin, they soon caused to open his pipes in such a manner that he might have been heard at two or three miles distance. These cries soon attracted the wolves to the spot; when they had approached to within a short distance of the sledge, Captain Eurenius discharged his piece, and severely wounded, as he supposed, one of the number. The report of the gun, however, caused the horse to take fright, when capsizing the sledge and smashing the shafts to pieces, he went off at full gallop, with the latter dangling at his heels.

Captain Eurenius and his brother were now in a rather awkward predicament; they had, besides, lost their ammunition, and had only one loaded gun left. Leaving the pig in the sledge to its fate, they therefore faced towards their home, from which they were distant several miles, at their best pace. In this while, as it may be supposed, they cast many an anxious look behind, to see if the wolves were in pursuit; but their fears were at length relieved, for, after proceeding some way, they met their father and a posse of people advancing to These had seen the horse come galloping their assistance. home with the broken shafts, when, knowing the nature of the service on which Captain Eurenius and his brother had been engaged, as well as the direction these had taken, they lost no time in hastening towards the spot. The meeting was a joyful one, the father being not a little delighted thus to find his sons in safety. The whole party then repaired to the scene of action: here they found the pig had been taken from the sledge and devoured. This also seemed to have been the fate of a wolf,—the same, it was supposed, that Captain

Eurenius fired at, for some pieces of skin and bones of one of those ferocious animals were found near to the spot.

During severe weather, when wolves are famishing with hunger, their natural timidity, as I have said, forsakes them, and they then oftentimes conduct their attacks in the most daring manner. Among several instances of the kind which have come to my knowledge I select the following.

In the depth of a hard winter, many years ago, Captain Eurenius and a friend were one evening traversing the Wenern Lake, which was then firmly frozen over; this was at no great distance from the town of Wenersborg, situated, as I have remarked, at the southern extremity of that noble expanse of water. The companions were in a sledge and jogging quietly along, when suddenly their horse pulled up, and became violently alarmed and agitated. For a while they . were at a loss to divine the reason why the animal should be so affrighted, but on looking ahead they discovered a drove of twelve or fourteen wolves; these presently approached to within a very short distance of their vehicle, and seemed to threaten them with an immediate attack. Very unfortunately, they had no gun along with them on this occasion, but both were armed with good swords. Captain Eurenius therefore took the reins, whilst his friend jumping out of the sledge, posted himself, sabre in hand, immediately in front of the horse; by these means their ferocious assailants were kept at bay. Finding himself thus protected, the poor animal again moved forward. The man now kept advancing a pace or two ahead of the horse, brandishing his sword all the while to drive off the wolves; these were never more than a very short distance from him, and often so near that he could almost touch them with the point of his weapon. In this manner Captain Eurenius and his companion proceeded for five or six miles, and until they reached the very outskirts of the town of Wenersborg, when the wolves thought it prudent to beat a retreat. Captain Eurenius stated that during all this while they did not feel much alarmed for their personal safety, as they depended on their trusty swords to get them out of the scrape in the event of its coming to a personal conflict with the wolves. For the life of the horse, however, they entertained great apprehension. Indeed, Captain Eurenius felt assured that if he had not had a companion in the sledge on this occasion, even if his own existence had not been sacrificed, the poor animal would most undoubtedly have been destroyed by those pernicious beasts. He said, moreover, that the wolves never attempted to get into the rear of the sledge, but always kept in advance of it. This, if it be practicable, is usually the case with those animals, and is supposed to be owing to their dread of falling into an ambuscade.

Some fifty years ago, and when quite a boy, Captain Eurenius was one starlight and very cold night returning from a dance in the vicinity of Wenersborg. It was Christmas-time, and there were fifteen or sixteen sledges in company. Most of the horses were provided with such bells as those of which I have spoken. In the middle of the cavalcade was a sledge occupied by a lady, at the back of which, as is frequently the case, sat the servant, who was driving; whilst on a bear-skin, which covered her feet, a favourite lap-dog was reposing. In passing through a wood, however, and in spite of the jingling of the bells, a large wolf suddenly sprang from a thicket, when, seizing the poor dog, he leaped over the sledge, and was out of sight in a thick brake on the opposite side of the wood in the course of a few seconds.

A somewhat similar anecdote to the above was related to me by Lieutenant Oldenburg. Two of his friends, whose names I forget, when on a journey in the winter-time, were accompanied by a favourite dog, which was following immediately in the rear of the sledge. All of a sudden two famished wolves dashed at the dog, who, to save himself, ran to the side of the vehicle, and jumped over the shafts between the horse and the body of the carriage. The wolves, nothing deterred, had the audacity to take a similar leap, when, as ill-luck would have it, they got hold of the poor animal. But the dog was large and powerful, and his neck, besides, was armed with one of those formidable-spiked collars so common to be seen in From these causes he was enabled to escape from Sweden. the fangs of his assailants, when he at once sprang into the sledge, as if to claim protection from his masters. however, the wolves were afraid to pursue him, though for a

considerable distance they still continued to follow the vehicle. On this occasion, both of Lieutenant O.'s friends were unarmed, and in consequence, the beasts escaped with impunity.

Another anecdote, of a rather curious nature, was told me by an acquaintance of mine in Wermeland. A peasant was one day crossing a large lake in his sledge, when he was attacked by a drove of wolves; this frightened the horse so much, that he went off at full speed. There was at this time a loose rope hanging from the back of the vehicle, that had been used for binding hay, or other purposes. To the end of this a noose happened to be attached. Though this was not intended to catch a wolf, it fortunately effected that desirable object, for one of the ferocious animals getting his feet entangled within it, he was presently destroyed, owing to the pace at which the horse was proceeding. The poor peasant at last reached a place of safety. Though he had been dreadfully frightened during the chase, he not only found himself much sooner at the end of his journey than he had expected, but richer by the booty he had thus unexpectedly obtained. The skin of a wolf in Sweden is worth, at this time, about fifteen rix-dollars, or as many shillings.

## CHAPTER XXIV.

The Wolf still—A Night Alarm—Domesticated Wolves very Docile—Exceedingly interesting Case—Amusing Circumstance—"Richard was himself again"—Wolf-Hunting on Skidor—Sometimes prolonged for several Days—Wolf-Hunting with Dogs—Wolf-pits—A Parson in a Wolf-trap—The Luder-plats—The Wolf and the Reindeer.

ALBEIT my friends and neighbours were occasionally sufferers, my own dogs were never carried off by the wolves, though in one instance they were in considerable peril. This was at an after-period, when residing at Gäddabäck, distant three to four miles from Ronnum. It occurred in this manner:—About midnight I was aroused from my slumbers by the furious

barking of the dogs. Imagining there were thieves on the premises, I at once jumped out of bed, and without waiting to put on one particle of clothing, stealthily left the house, in the hopes of coming unawares on the depredators. I had a singlebarrelled pistol ready cocked in my hand; but, when I turned the corner of the outbuilding where the dogs were chained, I found myself confronted, at some ten paces distance, with a Though pretty dark at the time, and amongst the large wolf. trees, I could distinctly make out his figure; and, without the loss of a moment, I levelled my weapon, and pulled the trigger; but, unfortunately, the cap missed fire. The beast, which had previously been stationary, becoming now alarmed, wheeled about and moved off; and though, whilst in the act of retreating, I sent a ball after him—for at this second attempt the cap exploded—it did not apparently take effect; but this was less surprising, as from his being in motion, and the foliage, my aim was very uncertain.

However savage wolves may be in their native wilds, yet if reared up from a tender age, and kindly treated, they will become as docile as dogs.

"My husband," says Mrs. Carin Bedoire, "purchased at Gysinge three wolf cubs, which had only just obtained their sight. One of them was a female. I petitioned for leave to keep these little creatures a time. They were together for about a month, during which period they had their abode in an arbour in the garden. As soon as they heard me in the court-yard calling 'Små valparna' (little puppies)—for so I was accustomed to designate them—they would run up to me with such signs of affection and pleasure as was quite surprising; and when I had caressed them, and given them food, they would return to their asylum. After the lapse of a month one of them, a male, was presented to M. af Uhr, and another, a female, to M. Thore Petrée. When the one we retained was left by himself, he took refuge with the work-people, though for the most part he followed me and my husband. It was remarkable, that this wolf became so faithful and attached, that when we took a walk about the estate, and he was with us, he would crouch beside us when we rested, and would not allow anyone to approach nearer than about twenty paces, for

I scolded him, he would lick my hand, at the same time always keeping his eyes fastened on the intruder. He went about the house and in the kitchen in the same manner as a dog; and was much attached to the children, whom he would lick and play with. This continued until he was five months old, by which time he was grown large and strong, when my husband, who feared lest during his gambols with the children he might injure them with his claws, which were very sharp; or that if by accident he found blood upon the children, he might feel inclined to do them injury, determined on having him tied up. But he nevertheless often went loose with me when I took a walk.

"He had his kennel in the lower yard near to the gate; and in the winter time, when the peasants came with charcoal, he would leap on to the stone fence, where he would wag his tail and whine until they came up to him and patted him. At such times he was always desirous of searching their pockets that he might ascertain if they had anything good to eat about The men became so accustomed to this, that they used to amuse themselves by putting a piece of bread in their coat-pockets to let him find it out, which he perfectly well understood, and he ate all that they gave him. Besides this he ate three bowls of food daily. It was remarkable that our dogs used to eat with him out of the same bowl; but if any strange animal attempted to share the food with him, he would go beside himself with rage. Whenever he saw me in the yard he kept up a dreadful noise, and when I went up to his kennel he would raise himself on his hind legs, and place his forepaws on my shoulders, and in the exuberance of his delight would lick me; but when I left him he would howl with sorrow.

"One day a fox was shot. Bedoire having fastened a rope round the carcase gave it to the wolf, who received it with much gratification, and drew it along with him into his kennel. But when Bedoire pulled at the rope, with the intention of taking it from him again, the wolf held his prey with such tenacity that both were drawn out of the kennel together; and even then he only let go his hold of the carcase with the

loss of two of his front teeth. As, however, these were his temporary teeth, others came in their place in about three weeks afterwards. We had him for a year, but as he was rather expensive to keep, and howled greatly at night, Bedoire determined on shooting him.

"The gardener, and the poetaster Malmberg, were his Banemān, or executioners. And it was not without sorrow that I saw him led to the garden—his first asylum—where he met his doom.

"The wolf presented to M. af Uhr, singularly enough, shared his kennel with one of that gentleman's dogs. The latter lay along with him every night; and when meat was given him to eat, he never could find it in his heart to devour the whole of it, but carried a portion to the wolf, who always received it with friendly gesticulation. And it happened not unfrequently that the wolf rewarded his friend the dog in a similar manner.

"Of the female wolf I have nothing to relate; but I have heard it said she was very ill-tempered and ferocious."

Having at different times reared wolves myself, I can, in part at least, corroborate Mrs. Bedoire's very interesting account as to the docility of those beasts when in confinement, I say in part, for having pea-fowl about the premises, I never ventured to give my wolves that degree of liberty which the one that lady more particularly speaks of enjoyed whilst under her protection. While being handled, however, they were perfectly harmless; and, so far as myself and people were concerned, never evinced vice of any kind.

At one time, indeed, I had serious thoughts of training a fine female wolf, in my possession, as a pointer; but I was deterred, owing to the penchant she exhibited for the neighbours' pigs. She was chained in a little enclosure, just in front of my window, into which those animals, when the gate happened to be left open, occasionally found their way. The devices the wolf employed to get them in her power were very amusing. When she saw a pig in the vicinity of her kennel, she, evidently with the purpose of putting him off his guard, would throw herself on her side or her back, wag her tail most lovingly, and look innocence personified. And this

amiable demeanour would continue until the grunter was beguiled within the length of her tether, when, in the twinkling of an eye, "Richard was himself again."

Whilst young, her charges were invariably directed at the rear of the animal; and if she got hold of the tail, it was always taken off as clean as a cook would slice a carrot. Several pigs were under my own eye thus mutilated. When full grown, however, she was not altogether satisfied with this fraction of a pig, and if one of a small size approached her too near, she would pitch bodily upon it, and seizing it crosswise in her mouth, as far as the length of her chain admitted, walk backwards and forwards with it in front of her kennel. The squeaks of the sufferer were, on these occasions, awfully piercing, and I have had difficulty in relieving them from durance. And no wonder, if the jaws of the wolf, as I have heard asserted, possess such power as to enable his teeth to penetrate a thin plate of iron.

A good many wolves are run down on skidor, chiefly, however, in the northern districts of Scandinavia, where the country is more open, and but little intersected by paths.

The Lapps, when thus pursuing the wolf, have frequently no other weapon than a stout staff of about six feet in length, armed at one end with a pike, which staff serves to expedite or retard their own progress, and also to deal destruction to their worst enemy. So the wolf, with every propriety, may be called; for night and day, summer and winter, he hangs with the tenacity of the nightmare on the rear of the reindeer, ever and anon picking up a straggler, and, in one instance, we are told, as many as forty out of a single herd. Several individuals usually take part in these hunts; and as the wolf often holds out a day or two, the men are provided with a good supply of provisions. When the beast finds himself pursued, he, like the bear, takes to broken ground and the most tangled thickets, from whence, at times, there is difficulty in dislodging him. When hard pressed, and that he begins to tire, he makes for a beaten path if one is to be found, where, as the footing is hard, he for a time has it all his own way. Sooner or later, however, he is necessitated to quit the "vantage ground," and betake himself once more to the forest or the fjäll, as the case may be. Thus the chase may continue for a day or two until the beast is fairly worn out with hunger and fatigue, when his pursuers are enabled to close with him—generally on the long slope of a hill—and to put an end to his miseries and his life.

From actual experience, I myself can say nothing of the chasse in question, for though during my wanderings in the northern forests I have frequently fallen in with the tracks of wolves, the localities were always such that any attempt to overtake the beasts would have been worse than useless.

Little in the shape of wolf-hunting—such, at least, as accords with our notions of hunting—is practised in Sweden; and that little is, from necessity, always followed on foot. From the difficult nature of the ground, and the peculiar style of fence, it would be quite an impossibility to pursue that beast on horseback. Even the wolf-hunts that do take place are chiefly for the capture of cubs, the dogs of the country being little capable of facing the old ones. Were the dogs ever so courageous and strong, indeed, it would hardly be worth a man's while to make wolf-hunting a regular pastime, as from the immensity of the forests, and the wandering habits of the beast, the hunter would never know where to find him.

There are individuals, however, who follow up this sport. "The Hof-Jägmästare, J. A. Ström," we are told, for instance, "makes use of strong dogs of a powerful breed for wolf-hunting. In the early part of the summer, when the cubs are small, he begins with six dogs, but in the autumn, when the young follow the mother, twelve to twenty-four dogs are slipped from their couplings at once."

Numbers of wolves are captured in Sweden in the Varggrop, or wolf-pit; which is usually ten to twelve feet in depth, by the same measurement in diameter. Many are square, some octagonal, and others circular. As well for the purpose of preventing the earth from falling into the pit, as wild beasts, that may be incarcerated, from working themselves out, the sides are usually built up with wood or stone. The proper construction of the pit-fall would seem to be still a mooted question in Scandinavia; but all agree in this,

that it should be sunk in a dry and open situation, and in preference free from trees, bushes, and fences; as also at not more than two hundred to three hundred paces from the Ladu-gård, or cattle-house; for—singularly enough—the more distant the Varg-grop is from that building, the more the suspicions of wild beasts are excited.

Great execution is at times done in these pit-falls. In one instance, Dr. Willman informed me, no less than eight wolves were captured at one and the same time. Others had also been engulphed, as was evident by the marks in the snow, but had subsequently escaped, and, as it was believed, by making the backs of their fellows serve as scaling ladders. On the occasion in question, a fox was likewise made captive, and though surrounded by his most deadly enemies, was still alive and unhurt.

Bipeds as well as quadrupeds sometimes fall into the Varggrop, from which, owing to the perpendicularity of its sides, and its depth, escape, by their own exertions, has been found impracticable. A somewhat amusing adventure of the kind is related of a certain parson who flourished nearly a century ago.

"The reverend gentleman," so goes the story, "was a great sportsman, and like many others of the cloth, had a Varggrop for the capture of wolves and foxes. One Sunday morning, after preparing his sermon, and putting on his Kragar, or bands, he took it into his head to pay a visit to the Varg-grop. On reaching the spot, he observed an aperture in the straw covering the pit-fall; and although he had then no time to send for a rope and a ladder to draw up the prisoner, he could not resist the temptation of seeing what beast it was of which he had made prize. For this purpose he peered down the pit, but having advanced too near to the brink, he overbalanced himself, and fell head over heels to the bottom!

"When he had somewhat recovered from the shock and fright this break-neck tumble had given him, he looked cautiously about his gloomy prison, and discovered in a corner a fox that a few hours before had made the descent in the same unexpected manner as himself. What was now to be done? The sermon was, it is true, in his pocket; everything was in order, and hearers alone were wanting; for the only one

present seemed to be fully occupied with thoughts as to how he could best obtain his freedom. The same cogitation began now to trouble the poor parson, when his English byxsäcks ur was pointing to near ten o'clock, the hour that the service should commence.

"Let us now leave the worthy man in safety, though in bad company, and see how things were going on at the Parsonage. Here there was more hurry and flurry, and more confusion of tongues amongst the women, than if the Dean or the Bishop had been expected. One ran here, and another there. If any of the newly-arrived congregation were met with, the same question was put to each: 'Have you seen the pastor?' But all gave the same answer: 'No!' An old and faithful servingman, however, who, to give his ears a little ease from the eternal jabbering going on amongst the women, had retired apart, began to reason within himself as to where his master could be; and it was not long before it entered his mind that by possibility he might have fallen into the Varg-grop.

"Without communicating his suspicions to any one therefore, he hastened towards the spot, and on his near approach he heard the parson singing with great fervour the 99th (Sw.) Psalm. Overjoyed at the discovery, he advanced to the edge of the abyss, and reached out his hand to the reverend divine for the purpose of helping him up. But the master was heavier by several stone than the man; and in his anxiety to escape from imprisonment, he pulled at the proffered hand with so much force as to draw the poor fellow down into the pit. Here now stood the trio, though certainly with altogether different reflections on their predicament; and here they had to remain until the afternoon, when aid at length arrived.

"And what of the assembled congregation? inquires the reader. Why, they had in all patience—the men with long tobacco-pipes, and the women with still longer histories of what had occurred in the parish—whiled away time in the church-yard, until hunger told them it was their dinner-hour!

"The report of this misadventure soon circulated; and as rumour generally makes a story worse than it really is, people at length said that three foxes of different colours—three cunning old rogues, in short—had been caught in the parson's Varg-grop! Happily, there was no one ill-natured enough to tell the tale to the Bishop; but it is related that, from this time forward, the reverend gentleman was careful to attend to his congregation in the first instance, and to his wolf-trap afterwards."

Wolves and other noxious animals are also frequently destroyed at the Luder-plats itself by means of Gillrade Gevär, or fire-arms, set in the manner of spring guns. Even before the invention of gunpowder people adopted a somewhat similar mode, which they expressively called Sjelf-skjut, or self-shot. For they were accustomed so to place bent bows, that on the beast touching a certain string the arrow was released and pierced him to the heart.

But the more common plan of killing wolves when congregated at the Luder-plats is by a species of Jagt, or hunting, which the Swedes call Skytte för glugg—that is, shooting from a small aperture in the side walls of a cow-house or other out-building, or it may be from a hut erected for the special purpose, near to which the Luder—consisting generally of a dead horse—is placed. But this method can only be adopted in the winter time, say from November, when the snow first falls, to about the end of March.

"The Glugg," so we are told, "ought to be somewhat more capacious within than without, and either kept closed by a small glazed window, so contrived as to open inwards at pleasure, or partially closed with a wisp of straw. But in the latter case ample room must be left, as well for the sportsman to see what is going on outside as to admit the gun when the time has arrived for using it. If possible, the Glugg should face the south; the east and west may answer, but the north will never do; for, to say nothing of being exposed to the coldest wind, one has little benefit from the moonlight.

"The Luder should be deposited about fifteen paces from the Glugg, and in such manner that either the head or the hind-quarters of the animal face the aperture; for though opinions vary as to which end should be foremost, all agree in this, that it will not answer to place the carcase crosswise, for in that case the expected visitor would find shelter behind it.

"When the wolf or fox come to the Luder, and commence

eating, then is the time to fire. But in bringing the gun to the shoulder care must be taken that the muzzle does not protrude much beyond the Glugg, or otherwise he may take alarm and move off. One should first take aim along the line of the snow, and then raise the gun until the beast obscures the Korn, or 'sight,' when the trigger should be pulled. the sportsman must be careful not to fire too high, as from the usual loftiness of the Glugg and the short range he is apt The gun—that it may be the more readily handled should be shorter than usual, and it should also be of pretty To avoid the danger of setting fire to the large calibre. building, all cobwebs, etc., should be carefully swept away, and one should load with wadding of such a nature as not to be easily ignited. If the beast fall to the shot, he ought not to be approached incautiously. When only wounded he must be immediately sought after with a lanthorn. But if not found in the vicinity, it is most advisable to desist from the search until the coming daylight renders it practicable to track and follow him to a distance.

"To watch at the Glugg, two men are required, so that they may sleep by turns. They should always be accompanied to the ambush by a third, who ought to remain with them for a while, because the fox's cunning is such that, otherwise, he may suspect a trap and keep his distance. From dark, when all is still, to about eleven o'clock, the fox usually makes his appearance. But if not during that time he will not probably show himself before three in the morning, or between that hour and when people are up and moving, but after all the time of his coming is rather uncertain. It is known, however, that the farther the season be advanced the later he appears, and that he never shows himself at midnight."

It should be observed that shooting thus, "för glugg" is seldom attended with much success during bar-vintrar—that is, winters when there is little or no snow on the ground; also, that as wild beasts seldom visit the carrion at the new moon, it should not be laid out until the first quarter, when the nights are light, and when of course it is best to shoot. It is worthy of remark, that although the wolf seeks the Luder-plats only during very hard weather, the fox, on the contrary, visits it

in preference when the snow is but moderately deep and the temperature not particularly severe.

Many wolves are captured in Scandinavia in the common steel trap. As regards the midland and southern provinces of Sweden, this is chiefly the case in those set for foxes; for owing to the more wandering life led by the wolf than by the fox, his duller organs of smell, and consequent less capability of winding the bait from a distance, together with it being probable that his instinct leads him in quest of larger game than the fox is satisfied with, it would be but a poor speculation to lay out traps expressly for the wolf—the rather because so many other and more advantageous modes can be had recourse to for his destruction.

However, in the more northern districts of the peninsula, especially in Lapland, where the wolf follows the herds of reindeer in their wide wanderings from forest to fjäll, and from fjäll to forest, this mode of capture is much resorted to, and, as it is said, with very considerable success. But the trap is not baited, being merely concealed beneath the snow in such paths as the beast is likely to traverse. It is fastened by a chain to a block of wood some six feet in length, and of considerable thickness. This precaution is adopted in order that in the event of bad weather the trap itself, as well as the prisoner—if one happens to be made—should not be altogether buried in the snow and lost. It is only brought into use in the winter time, after the snow has fallen. It is placed in preference in tracks made by the herds of tame reindeer; for these Lapp-vägar, as they are called, are always frequented by several kinds of wild beasts. "First in order after the herd," M. von Wright informs us, "comes the daring wolf, who now and then picks up a fawn, or even an old deer, that straggles from the herd. Then the voracious glutton, and after him the fox, who by his cunning manages to share in the plunder that his worthy predecessors have seized by force. Lastly comes the Arctic fox, with the hopes of picking up some of the crumbs that may have fallen from his masters' table. Several traps are usually set on the same pathway at a distance of one to two miles apart, in order that though the wolf may avoid the one toil he may fall into some of the rest."

## CHAPTER XXV.

The Northern Lynx—His Size—Means of defending itself—
Favourite Resorts—Not Gregarious—Thirst for Blood—
Destructive Disposition—Particularly partial to the Hare
—Can be easily Domesticated—Killed in Skalls—Hunted
with Dogs—A Chase for a day and a-half—Fiercely
defending himself—The Death—Another Run—Still
another—The Lynx brought to Bay—A Desperate Encounter—No fewer than eleven Dogs wounded.

THE Northern Lynx is not much inferior in size to the wolf, and is reputed to be more shy than bold. Though he commonly confines himself to the wilds of the forest, hunger occasionally induces him to visit the homestead, and if he finds a crevice in the building, or a window open, he fails not to enter the cattle-house. But if at such times he finds retreat cut off, his courage altogether forsakes him, and though he may be surrounded by numerous sheep and goats, he will not touch a single one of the flock. Unless his life be jeopardized, man he never assails, but when he does charge, his onsets are described as somewhat desperate. His principal "When attacked by a dog," Ponweapons are his claws. toppidan tells us, "he throws himself immediately upon his back in the manner of a cat, and turns up his forelegs, to be the better able to defend himself; the dog on this lays hold, and thinks himself conqueror, but the lynx then makes use of his sharp talons so effectually, that he flays the enemy alive."

The favourite haunts of the lynx are mountainous and deeply wooded districts, in the hidden recesses of which he is less subject to persecution, and can more readily pounce on his prey. Except during the pairing season, when the male seeks far and near for a mate, he is not a great wanderer—at least in the summer time, when there is greater facility in procuring food. The line of country he hunts over is not very extensive; and it is not until he has destroyed nearly all the game upon his beat that he removes to another, where, in

like manner, he only remains so long as prey is to be found. The singular notion is entertained by some that when the lynx thus shifts his hunting ground, the migration, if so it can be called, always takes place either at the end of the last quarter of the old moon or at the commencement of the new, and that, should he return again to the same district, it is never within less time than a month.

The lynx is not, like the wolf, gregarious. A pair, male and female, generally keep together, and the mother is often followed by her cubs, which, indeed, generally remain with her until nearly arrived at maturity; but otherwise these animals never congregate. The male and female are said to evince much affection for each other, and if one should be killed, the survivor will remain long in the vicinity—on the look-out, as it were, for his missing comrade.

The lynx, when full grown, at least, does not seem to ascend trees from choice. It would rather appear, on the contrary, that only when very closely pressed he seeks their friendly shelter. But it is not from the want of ability, for from the extreme sharpness of his claws, and his cat-like spring, he can climb the smoothest trunk, even though altogether divested of branches. It used to be said he chased squirrels or martin-cats from bough to bough, and that even in the very tree-top, but this fable is now pretty well exploded.

The lynx, like others of the tiger tribe, unless compelled by hunger, or disturbed, rests for the most part during the day. Sometimes he conceals himself in the cleft of a rock, or under the root of a prostrate tree, but far more generally he couches on the top of a boulder, a stump, or the angle of a projecting rock, from whence he can detect the approach of danger, as also of the animals on which he preys. From such situations I have myself repeatedly started the lynx, and that even in the most severe weather, and as he thus from choice would seem to set the rigour of a northern winter at defiance, I conclude he must be a very hardy animal.

At dusk or early dawn, the lynx most commonly roams the forest in search of prey. Some will have it that he lies in ambush until his victim has approached so near, that two or three springs will bring it within his grasp; but others say, and with much more probability, that he steals upon it unawares in the manner of a cat.

If it be a hare, or other small animal, he destroys it at once, and devours it bodily, or so much of it as his necessities may need. But if it be a sheep, or the like, he seizes it by the back with his terrific talons, and throwing the poor creature to the ground, rends the throat, and gorges himself with the warm blood as it gurgles from the gaping wound. Afterwards he tears open the cavity of the chest, and eats the parts most replete with blood—such as the heart, the liver, and the lungs; and if these should not suffice to stay his hunger, he feasts on the flesh also.

Should it be a larger animal, however, such as a deer—the lynx, according to a popular, though probably erroneous notion, casts himself from some little eminence, from a boulder, or a tree, on to his victim's neck, and then rends open the arteries, the position of which he knows from experience. And as when walking, his talons, in the same way as those of the cat, are always in the sheath which nature has provided, that they may be protected from wear and injury; they are so sharp, that during this barbarous operation they perform the part of lancets.

It is said that if the lynx fails in his spring, and his intended victim saves itself by flight, he never pursues it any considerable distance, but in like manner with others of the feline tribe, slinks back to his retreat.

"Some years ago," M. Ekström relates, "whilst a peasant was occupied with agricultural labours in the spring, he observed that some sheep feeding in a wooded pasture shied, when passing near a boulder on the hill-side. Inclination for the green sward, however, having at length got the better of their fears, they once more approached the spot, when out dashed a large lynx from his ambush, and made several bounds towards them. But as the poor creatures had somewhat the start of him, they were so fortunate as to escape his clutches. Seeing that his efforts were fruitless, the beast now turned about and retreated to his hiding-place, which the peasant observing, he hastened home for his gun, and stealthily approaching the spot, shot him whilst in his lair."

It is generally asserted that if, when the lynx has satisfied his hunger, part of the victim remains, he buries it for a future meal. But I doubt the story for the reason that, during my wanderings in the northern forests, I have constantly fallen in with hares—or rather their bodies, the heads being usually gone—which had been killed by those beasts, and lying altogether on the surface of the snow; on which remains, indeed, I and my people have often feasted.

In proportion to their numbers, lynxes are probably more destructive than any of the Scandinavian wild beasts. Like the wolf, the lynx is very sanguinary, and slaughters ten times more than he devours; and when he thus commits needless butcheries, he does little besides gorge himself with the blood of his victims. "In a pretty large wood in the vicinity of this place," so we are told by M. Sköldberg, "a she-lynx and her two cubs, killed in a single day no less than twenty-three sheep. The necks of some were partially eaten, but the bodies remained untouched." Pontoppidan, when speaking of the lynx, tells us something of the same kind. "They are very cunning in undermining a sheep-fold," such are his words, "where they help themselves very nobly."

According to the last-cited author, however, the tables are at times turned on the lynx. After informing us that this beast is in the habit of burrowing in the ground, he goes on to say: "It happened lately that a Goup (the Norwegian for lynx) was found out by a sly he-goat who, perceiving his subterraneous work, watched him narrowly, and as soon as his head came forth, before the body could be got out, butted him, and gave him such home pushes, that he laid him dead on the grave of his own making."

Not to speak of the ravages he commits in the fold, the lynx, moreover, is the sportsman's greatest enemy, being beyond doubt the most destructive beast that ranges the northern forests. The capercali, the black-cock, are too frequently his victims, and the poor hare, which would seem to be his most choice morsel, he pursues so incessantly and perseveringly, that few within his beat escape him.

According to Ekström, "the lynx, like the house-cat, buries his excrements, and also his urine, in porous earth or sand.

From this his custom, it was formerly believed that Amber (the Lyncurium of the ancients) originated in the urine of this beast." The lynx's claws, Pontoppidan says, were in his day considered a specific for the cramp, when worn round the neck; but the worthy Bishop wisely adds, that he cannot affirm such to be the fact.

The flesh of all the tiger tribe is in England considered the worst of carrion; but this is a mistake, as regards that of the lynx at least, which greatly resembles veal in appearance, and to my personal knowledge—for I have often partaken of it—is very palatable. Grimalkin in the hand of Soyer would probably prove equally good.

Savage as the lynx is in his native wilds, he may be readily domesticated. I speak from my own experience; for on two several occasions, I have brought up those animals from cubs, and kept them for a year or more, and they were then sent over to England. Whilst in my possession, they evinced no vice whatever, and we handled them and did what we pleased with them; but though at times allowed their full liberty, they were not, as a rule, permitted to go at large. M. Grill testifies also to the domesticity of the lynx. Having on one occasion procured two cubs of a very tender age, he placed them with a cat, in exchange for her kittens; and what is singular, the step-mother showed the same affection towards them as to her own progeny. One died; but the other throve well, and soon learnt to eat anything that was given to him. Even when he was half as large again as his step-mother, they got on extremely well together, and the cat licked and caressed him as high up as she could reach; but when he was four months old, the cat began to think he was altogether too large for a veritable kitten, and had an ugly look about him, so that when he would continue his caresses, she would set up her back and spit at him.

Though the lynx may not "tax the peasant higher than the crown," he is sufficiently destructive, and various expedients are therefore employed to compass his death. Some few are killed in skalls—though not so many as might be supposed; and probably for the reason, that on these occasions the lynx often takes shelter either in trees, or in fissures of rocks, in

which case he may very readily be passed by the people. From his extraordinary agility, moreover, it is not always easy to keep him within the cordon. Once, indeed, near to the conclusion of a skall—under my own management—when he was driven into a corner, and when the people were standing three or four deep, the beast sprang clear over the men's heads, and made his escape! I did not happen myself to see the vault; but everyone near the spot where the incident occurred, averred such to have been actually the case.

Many lynxes are hunted to the death with dogs, which, however, must be specially trained to the purpose. It is always desirable to ring the beast in the first instance, for if the dogs be put on the Spår whilst it is quite fresh, he will commonly—more especially if young—either "tree," or be brought to bay in a short space of time, in which case the sportsman can shoot him at his leisure. If a man on these occasions keeps a respectful distance, there is little or no danger, for it is not once in a thousand times that the lynx becomes the assailant. But should he incautiously approach the beast too near, he may not improbably receive severe maltreatment.

"It was during the last days of February," Lieutenant C. E. Aberg tells us, for instance, "that I found the tracks of a lynx, but I had to follow them for a day and a half before I had approached the beast sufficiently near to slip the dog, which, as wolves were thereabouts, was provided with Spikklüdnad, in other words, a spiked collar. After the run had lasted for two or three hours, and the lynx had become weary, the dog succeeded in bringing him to bay near to a birch tree, which gave me time to come up and to shoot at him, though with no sensible effect, owing perhaps to the distance being too considerable. But to fire my second barrel was impossible, because the animal, at a single bound, threw himself upon the dog. A sharp combat now ensued between them, to which, on my reaching the spot, I attempted to put a termination: and although I succeeded in making the beast let go his hold of the dog, he struck his claws into one of my thighs, which he lacerated—but not worse than that the wounds healed in a week. As I found his claws sharp and disagreeable, I made

a violent effort to escape from the beast; but with no better success than that I fell down with my face in the snow and with the gun underneath me, and as the lynx would not quit his hold, he therefore lay as it were upon me. When, however, the dog found himself at liberty he presently freed me from the unwelcome guest, and in the battle which afterwards took place between them the beast was at length destroyed. It was a male, but not very large.—In consequence of his courageous efforts, the dog is still unfit for service, and as his leg was severely bitten, it will probably be some months before he quite recovers. Had it not been for the protection afforded to his neck by the Spik-klädnad, it is most likely he would have been killed."

Though one's own person is little risked in lynx-hunting, it frequently happens that the poor dogs are cruelly mangled by "One afternoon in November, 1825," says M. af Uhr, "I crossed over to Matt-Ön, an island in the river Dal, immediately opposite to Gysing-Bruk, with four harriers. man named Hampus accompanied me, as also another man with several untrained dogs. I separated my pack into two divisions, but as the first division was unable to start a hare, the second were also slipped from their couplings. I directed Hampus to take the whole pack to a certain hill-side; but one of the number parted from the rest, and kept hunting about the eminence on which I had posted myself to wait the coming Presently this dog began to challenge in a very unusual manner, and being soon afterwards joined by the rest they all went off together in full cry. In a moment, however, the music came to a stand-still, and was succeeded by sounds that gave undeniable evidence that a battle royal was Supposing that the hare was killed, I hastened to going on. But when I came to a morass, on which there were many prostrate trees that impeded my progress, I jumped on to the top of a large stone to see what was going on, and I then saw Hampus striking at something with his gun, which the presence of the dogs prevented him from shooting. the same instant a huge lynx attempted to spring up into a neighbouring tree; but one of the dogs seized him by the hind leg and drew him down again, on which the beast cast

himself on to his back. A second dog now seized him by the throat, and a third by the belly, which several attacks soon put an end to the contest, and the lynx never moved again. All the dogs were wounded; one especially was so badly hurt that it was needful to carry him to the boat. It was a short but terrible combat."

"During a hare-hunt," writes my friend M. Anders Oterdahl -famed not only as a sportsman, but for his hospitality-"when sixteen dogs were uncoupled they exchanged the hare for a lynx, which after some time was brought to bay in a very close thicket. It so happened that I was nearer to the dogs than my companions; and anxious to benefit by the opportunity, I ran so hurriedly and heedlessly as to fall just as I reached the spot where the fight was going on, and as near as might be upon the lynx himself. My very unexpected presence so surprised the combatants that the field of battle was forthwith removed some twenty to thirty paces to another brake so very dense that to enable me to see what was going forward I was necessitated to crawl on my hands and knees. Encouraged by my presence and cheers, the dogs still more furiously beset the lynx, which repelled their often repeated attacks in a most gallant manner. Lying on his back, he with his sharp and cutting claws struck out in every direction with the rapidity of lightning, dealing wounds on all sides, and in degree at least keeping his enemies at a distance. beast's head was towards me, but the dogs evinced such an extreme degree of ardour and courage that for a while I dared not to fire, for fear of hitting one or the other of them. At length, however, in the midst of this hot conflict, one of the dogs, more courageous than the rest, rushed between the hind legs of the lynx with the intention apparently of seizing him by the throat; and as at the same time the beast's breast became exposed to view, I took the opportunity and fired whilst at only four or five paces distance, and in an instant a period was put to his existence. It was an old and full-grown male. What with the baying of the dogs—our shouts and the deep growling of the lynx, which was distinctly to be heard in the mêlée—the scene to a sportsman was most interesting. Eleven out of the sixteen dogs were so wounded that they

could not be used any more on that occasion. Several of them were badly hurt, especially the one that charged so boldly. Although he escaped with life, he could never afterwards be used for hunting."

The lynx is not unfrequently captured by means of the common steel-trap, which device, owing to this animal not being gifted with the same degree of cunning, commonly succeeds better with him than with the fox. The trap is baited with the remains of a cat or a hare that he himself may have left undevoured, and is placed where they were found, the beast being very apt to revisit the spot on a future occasion.

## CHAPTER XXVI.

The Fox in Scandinavia—Appearance and Size—Characteristic features—A terrible marauder—The Arctic Fox—Differences from the Common Fox—Its Haunts and Prey—Disposition—Some advantages accruing to Scandinavia from the Fox—Investigations regarding the Black Fox and the Crossed Fox—Interesting Incidents relating thereto—Crosses between the Dog and the Fox—Fox-cubs brought up by Bitches—Also by a House-Cat—The Fox's great love for her offspring—Interesting Incident.

Foxes were rather numerous in all this line of country, and I have not infrequently killed them during my shooting excursions. As this animal contributes so much to the amusement of many in England, the few particulars I am about to give respecting him may not be altogether out of place.

The common fox is to be met with throughout the whole of Scandinavia, though he more generally confines himself to the wooded districts of that peninsula. His distinguishing characteristics are as follows: his predominant colour is tawny-red, which he retains throughout the year; his ears, which he

carries erect, are pointed and black; his feet are also black; his breast, and the extremity of his tail, are white. These, though the prevailing characteristics in the appearance, are by no means universal, as there are several accidental varieties of the common fox not infrequently met with in the Scandinavian peninsula. And lastly, he has, as is well known, a most villainous smell about him. He is somewhat more than two feet in length, independently of his tail, which measures a foot, and from two to four inches.

The habits and mode of life of the Scandinavian common fox are very similar to ours. In outward appearance, he struck me as exactly resembling the fox indigenous to the British Isles. A skin, however, of one of these animals, which I presented a year or two ago to Sir Francis Sykes, Bart., in Berkshire, was in that part of the country considered rather remarkable in regard to size.

The female is said to carry her young nine weeks, and brings forth in the months of April or May, from four to nine whelps. These, which are blind for the first eleven days, follow the mother until the autumn, when she turns them off to shift for themselves. If taken quite young, the fox can be tamed; but his savage nature is seldom entirely reclaimed. Instances have occurred, however, of that animal, when in a domesticated state, having shown nearly as much attachment to his master as a dog.

The fox's olfactory nerves, as it is known, are very acute. Like the dog and the wolf, he runs his game by the scent. Preparatory to a change of weather, or on the approach of a storm, he howls dismally. In the summer season the fox, and more particularly the female, is very subject to cutaneous disorders; and it is asserted, that if a horse lie down on the spot previously occupied by Reynard, he will likewise be infected.

As with us, the Scandinavian fox is a terrible marauder. Independently of the destruction he commits among domestic animals, he slaughters fawns, hares, capercali, and other small birds and beasts common to that peninsula. He is said to be fond of birds' eggs, of which he destroys vast numbers. He devours carrion greedily. He eats likewise crayfish and

mussels, which he finds in the rivulets; and when driven to extremity, grasshoppers and dew-worms. He also attacks and rifles the nests of wasps and bees.

The fjäll, or Arctic fox, which is to be found in all high northern latitudes, differs in many essential particulars from the common fox. In summer his predominant colour is dingy gray, or ash-colour, and in winter, white. His toes are covered with fur, in the same manner as those of a hare; his ears are short and rounded; his tail is of the same colour throughout; and he is said to emit a less disagreeable effluvia than that animal. He is somewhat smaller than the common fox, his body measuring less than two feet in length. His tail is about a foot long.

Foxes of a bluish colour are sometimes found in Scandinavia, which by some are thought to constitute a separate species; but others again, on the contrary, imagine them to be only accidental varieties of the fjäll fox.

In the summer season, the haunts of the fjäll fox are the fjälls, or such mountains whose summits are above the limits of arborous vegetation. But, in the winter time, they often fall down to the lower country in search of prey; and they have occasionally been found even in the most southern of the Swedish provinces. This animal usually forms his den in the cleft of some rock. It is capacious within, and well bedded with moss, and has several outlets. These earths, or dens, are said to be at times tenanted by several individuals, which is contrary to the habits of the common fox, who usually lives singly, or at most in pairs.

Owing to his haunts being farther removed from mankind, the fjäll fox is less destructive to domestic creatures than the common species. He feeds principally on the young of reindeer, hares, and other animals, as well birds as beasts, frequenting the elevated regions he inhabits. He destroys vast quantities of various kinds of aquatic birds, together with their eggs and young. He also eats frogs, of the species called Rana Temporaria, which are to be met with high upin the fjälls; and he is said to be so expert an angler, as to catch fish in the numerous waters to be found in those dreary wastes. Like the common species, the fjäll fox feeds upon carrion; but this

only when he is in a famishing condition. At such times, it is asserted, he will dig up and devour human carcases.

In disposition and habits, the fjäll fox differs very materially from those of the common species. He has neither their cunning nor speed, and he is besides less cautious and timid. Indeed, according to the concurrent testimony of all travellers who have visited the far distant Arctic regions, where inferior animals are almost unaccustomed to the sight of the lords of the creation, he is so little afraid of man, that he may be readily knocked on the head with a bludgeon. In Scandinavia even, where he is sufficiently persecuted, he is not much afraid of the human race. During severe snow-storms, he is occasionally driven down from the mountain-haunts into the valleys among the habitations of the natives, where he shows so little apprehension, that it is not difficult to approach him. In the winter season, when the sledge may glide in almost every direction over the frozen regions of the North, considerable quantities of stock-fish and herrings are conveyed across the fjälls from Drontheim, and other places on the northern coast of Norway, into the interior. At such times, it is said, the fjäll fox is allured by the smell of the fish, and occasionally approaches very near to the people who have it in charge, when, if anything be thrown to him, he readily snatches it up-It has happened that this species has been killed in the most southern parts of Sweden; but it has been noticed that instead of flying from his assailant, as is the case with the common fox, he has stood contemplating his approach until the fatal trigger has been drawn, and the loaded messenger has made him bite the ground.

Though the Scandinavian fox is sufficiently destructive among the smaller kind of wild, as well as domestic creatures, he, as a set off, kills vast numbers of rats, and other obnoxious animals, that might otherwise increase to such an extent as to overrun the country. His skin, besides, which is used for a variety of purposes, is valuable; and as great numbers are disposed of to Russia, and other countries, they are a source of considerable profit to Sweden and Norway. What the number of skins may be that are annually collected throughout the peninsula I know not, but it must be considerable; according

to Bishop Pontoppidan, who flourished two or three centuries ago, the district of Burgen, in Norway, alone produced about four thousand yearly. Even the fat of the fox is said to be beneficially employed in Sweden, the trunks of garden trees being sometimes rubbed with it to prevent the hares from gnawing the bark in the winter season.

Though Nilsson has quite satisfied himself that the black fox—that found in Scandinavia, I mean—and the crossed fox, are mere accidental varieties of the common fox, there are those in Sweden, nevertheless, who lean to an opposite opinion, and contend, with some show of reason, that not only does the black fox exist in the peninsula as a species, but that the crossed fox, if not also a species, is a hybrid between the black fox and the common fox.

Not very many years ago, indeed, several lovers of natural history were at the trouble of trying some experiments to elucidate this matter, the results of which, though not decisive of the question, are still curious enough in their way. To carry out their projects, a so called  $R\ddot{a}f$ -koloni, or fox colony, was established at Stenbrottet, near to Stockholm. It consisted of an enclosure, surrounded by palisades, or rather planks, some fifteen feet in height, and provided with suitable sheds, where every care was taken of the animals, and their proceedings very closely watched. But M. Björkman, one of the parties interested in the experiment, shall tell the story in his own words.

"In November, 1827," says that gentleman, "we purchased a brace, male and female, of crossed foxes. At the end of the following February (1828) pairing took place, and at the beginning of May (nine weeks, as it would appear, having been the period of gestation) three young ones were produced. They were at first blind, and of a blackish-blue colour, which, after the lapse of three weeks, gradually changed in two of them to the colour of the common fox, and in the third to that of the crossed fox. The red young ones retained, nevertheless, the peculiarities of the crossed fox—namely, larger proportions of body, greater breadth of forehead, larger eyes, thicker legs, and a more bushy tail. One of the red, and also one of the crossed foxes, were, at a subsequent period, sold

to the National Museum at Stockholm, where they are still preserved.

"During the year 1829, a red dog fox and four bitches were procured and turned into the enclosure, along with the two original crossed foxes. But although pairing was observed to take place, we did not obtain a single young one that summer, and for the reason, as it was believed, that when the females littered, they had immediately devoured each other's cubs. Owing to this misadventure, all the red foxes were at once banished the colony.

"In 1830 the two old crossed foxes produced three cubs (besides one or two others that the male, who was present at the birth, was known to have devoured), all of which were males, and closely resembled in colour and shape their parents.

"In 1831 the same pair of old crossed foxes had a litter of four; the dog fox, as on the preceding year, in spite of the efforts of the bitch to save them, having devoured others. Two of the survivors—both males—exactly resembled the father; but the remaining two—a male and female—with the exception of the tip of each hair all over the body being of a silvery white, were black.

"In 1832, this pair of black foxes, which were of somewhat smaller size and of quieter habits than the crossed foxes, were placed by themselves in a part of the enclosure specially prepared for their accommodation, with the object of ascertaining what their produce might turn out. But owing to an accident, the female escaped and was killed—so that the speculation proved a failure.

"In this same year (1832), the old pair of crossed foxes produced five cubs, one of which, however, died. Two of the remainder—both males—resembled the parents, but the other two—male and female—were black. In this instance the female was larger and more handsome than the male.

"At the commencement of the year 1833, the colony consisted of two pair of foxes—namely, the pair of old crossed foxes, then in their seventh year, and a pair of black foxes, the male in his third year, and the female in her first. In the middle of January, and, consequently, before the commence-

ment of the pairing season, the crossed pair were separated from the black pair, that the breed might not be mixed. On the 16th of the following April, the pair of crossed foxes produced five young ones, of which number four—one male and three females—were black; but the fifth was crucigerous.

"Two days subsequently, the young black female littered six cubs, all of which were black. On comparing the black cubs of the two litters together, those of the black female seemed to be somewhat darker than the others."

Everything now bid fair to solve the question as to whether the black and the barred fox were accidental varieties of the common fox, or whether they were of a separate species. Unfortunately, however, the hopes of those interested in the subject were doomed to be disappointed, for by a tissue of misfortunes, arising from natural and accidental causes, nearly all the foxes perished within a very short period, which circumstance threw such a damp on the spirits of the proprietors of the fox colony, that further experiments were not, I believe, prosecuted.

Some remarks of General G. A. Hjerta, bearing on this subject, are deserving of notice. After speaking of a black fox, caught by the late Governor Knut von Troil in the autumn of 1801, the gallant officer tells us: "What renders the circumstance remarkable, is, that although during preceding years, and even in 1802, barred foxes had been frequently captured thereabouts, yet after that period not a single one had been seen. Hence it was concluded, and with reason, that since the old black dog fox was killed, the race of barred foxes had become extinct."

What conclusion the reader may draw from the experiments carried on at the Räf-koloni, and the observations of General Hjerta, I cannot with certainty predict; but to my notions, so far from gainsaying the existence of the black or the crossed-fox (or rather the former perhaps), as a separate species, they tend to confirm the contrary hypothesis. Otherwise, why should a single pair of crossed-foxes, captured casually, produce, in the course of three or four years, some twenty cubs, all of which, with two exceptions (and even these differing

in size and conformation of body from the common fox), were either black or crucigerous? So large a proportion must surely tell against Nilsson's present theory (partly founded, it would seem, on the experiments in question) as to the black and the crossed-fox being mere accidental varieties of the common fox. And again—why is it that in England, where the common fox abounds, we never hear of his colour and form varying in any material degree? Taking the facts together, therefore, it seems to me far from improbable that either in the shape of a black, or possibly a crossed-fox, a species separate from the red, or common fox, really does exist in Scandinavia.

The reader will excuse some little prolixity on this subject, because it is one that cannot but interest the naturalist, and I should think the sportsman also; for if it really turn out that the crossed-fox is a separate species, it might be expedient to introduce him into England; as from the superior size and courage attributed to him, he might be fairly expected to improve the breed of our foxes, and consequently to enhance the pleasures of our great national pastime, fox-hunting.

But whether the black fox, or the crossed-fox, be merely accidental varieties of the common fox, or that they constitute separate species, the habits of all three are in the main alike; and the few observations I am about to make apply with equal force, as well to the one as to the other.

A cross between the dog and the fox is not uncommon in Sweden. "In the year 1816," M. Bedoire tells us for instance, "I captured several young foxes, but only retained a single male alive, which was chained up not only until full-grown, but for a whole year afterwards. At this period I had a pointer-bitch, which kept much in company with the fox, and at length paired with him. In process of time she brought forth several puppies, and amongst them one that greatly resembled its father, more especially as regarded the tail, which was nearly straight, and very bushy. This I kept until more than a year old, during which I remarked that he very seldom barked, and that when he did so his bark was unlike that of a common dog. That he might in time have become a good sporting dog, I think very probable; but as he was

exceedingly addicted to worrying sheep and poultry, I was obliged to destroy him."

Instances are on record with us in England, I believe, of fox-cubs having been brought up by bitches. But I do not remember hearing of the house-cat having acted the part of a wet-nurse towards them, as has been the case in Sweden. "During the month of May, 1830," says the Chamberlain, O. Nordenfeldt, a fox was found to have littered under a barn, at some distance from the mansion. The discovery was made in consequence of a bitch-fox being seen about noon to chase a cat into a tree, from which, after having been besieged for some time, she fell from fright, and retreated under the building in question. Michel followed close at her heels; and a report having been made of the circumstance, all the outlets about the barn were closed, the door opened, and the fox (which was at once killed) was found within it as well as the cat. Farther search was now made, and under the floor, composed of loose boards, four small, dark, ash-grey coloured and blind cubs were discovered; and as they did not see until eleven days subsequently, they were without doubt only recently born. For the first day they were fed on milk, which they sucked through a nipple-shaped piece of leather attached to a bottle. But as immediately afterwards a cat happened to breed, the kittens were taken from her, and the fox-cubs put in their place. She appeared to receive the little strangers exceedingly well, licked and fondled them, and brought them up as her own. Two of them died between the tenth and fifteenth day, but the remaining two grew rapidly, and continued healthy and lively. When pretty large, and chained to a kennel, the foster-mother still persevered in her attentions-and such continued until the month of August, when one day the cat by accident got entangled in their chain. This annoying them, they forthwith attacked her with such ferocity, that it was with difficulty a person who was present succeeded in rescuing her, though severely wounded, from the thankless teeth and claws of her adopted brood. At a subsequent period, one of the cubs contrived to make its escape."

But the sequel of the story is the most curious part of the affair; for writing at an after-period, M. Nordenfeldt says:

"During a walk in the month of last July (1832), immediately near to the house, I observed an unusual motion in a field of standing rye, and presently to my astonishment a fox, closely followed by the cat in question, made its appearance. I afterwards learnt that the cat had for some time past been in the habit of absenting herself from home during the greater part of the day; and that on one occasion she had returned from the forest badly wounded. Thus it would appear that though she had been ill repaid for all her tenderness, the old attachment between her and the fox, her nursling, had been renewed."

Many interesting stories are told in Sweden of the love the fox bears to her offspring, of which the following are perhaps not the least curious: "On the estate of Gunnerstorp in Scania," writes the Count Corfitz Beckfriis, "a bitch-fox was discovered with her cubs. The mother gallantly defended them; and although the cubs were lying almost at the feet of the by-standers, they had a great difficulty in preventing her from carrying them away. In the meanwhile a servant ran home for a gun; and after his return, several blows of a stick, and finally a shot, which took effect in her hind-quarters, did not deter her from bearing one of the cubs several fathoms from the spot."

Again: "Several years ago," says M. Sköldberg, "the late Länsman, M. Drougge, who resided in the parish of Knista, province of Nerike, set off one spring morning to a Ting, or court of assize. He had proceeded but a little distance from home, when he discovered a bitch-fox in the dyke by the road-side, with a whole flock of goslings—the Länsman's own property, which she had just slaughtered. Our traveller, who had nearly passed the fox unobserved, no sooner caught sight of her, than armed with his whip, he jumped out of the vehicle and sprang to the spot. But Michel waited not his arrival; for seizing one of the goslings in her mouth, she ran at speed across the fields towards her home. The Länsman, who would gladly have been both judge and executioner in this felonious affair, was necessitated to be a passive spectator of her flight; but he forgot not, nevertheless, to send maledictions by the score after the thief, and to yow within himself that at the first leisure moment she

should, for her misdeed, receive a visit from him in her own abode. When the Ting was over he, accompanied by several individuals, set forth to seek out her Kula—answering to our 'earth.' This was soon discovered; but owing to its depth, and the intricacy of the passage, all endeavours to get at the cubs proved fruitless. Whilst the excavation was going on, the mother kept moving backwards and forwards at a little distance, and the ears of the party received unmistakable evidence of her musical talents. But night at length set in, and for a time their labours were brought to a conclusion. The Länsman, however, who was something of a sportsman, thinking that the mother, when all was quiet, would return to see after her offspring, posted himself as sentinel near to the Kula, hoping thereby to shoot her. But she was too cunning for him, and after several hours he was obliged to return home empty-handed. Some days afterwards the Kula was re-visited, when it was found deserted; but on search being made in the vicinity, a new one was discovered, and five living cubs captured. These were carried to the Länsman's residence, where they were deposited in an old hen-house, from whence, however, the mother all but released them during the succeeding night; for in the morning the building was found undermined, and the half-rotten floor nearly bitten through. The cubs were now removed to an unoccupied room in the dwelling-house itself; and, even here, by burrowing under the foundations of the building—as she was discovered to be doing during the two following nights-her attempts to free the prisoners were renewed. But the matter did not rest here; for one night shortly afterwards, a continuous noise, as of some one scraping, was heard in the Vind, where in consequence the Länsman proceeded to ascertain the cause of the disturbance. On his way up the stairs, he was startled by an animal resembling a dog rushing hastily past his legs, to which circumstance he at the time paid little attention; but as when he reached the Vind he found everything quiet, he returned to his bed again. On the following morning, however, it was discovered that Michel had been the cause of the uproar; for with the intention of getting access to her cubs, she had been endeavouring to make an aperture in the chimney; and it then became perfectly clear that it was the fox herself, which in her hurry to escape, had nearly upset the Länsman whilst mounting the steps the night before. The room below, in which the cubs were confined, was now examined, but they were nowhere to be seen. At length, however, their cries were heard in the flue of the stove itself—the whole of which structure it was necessary to take down before they could be extricated."

## CHAPTER XXVII.

The Fox still—Possessed of Great Courage—A Fox Attacking its Pursuer—Its Extraordinary Cunning—Curious Instances related by Magnus—The Body of the Fox possessed of Healing Virtues—Plan of getting rid of Fleas—Its Mode of Fishing for Crabs—Getting possession of the Badger's Den—The Fox catching Sea-Fowl—Working a Fishing Net—Vaulting Powers—Not given to Depredations near its Breeding Place—Amusing Incident—Foxes killed in Skalls—Fox-Hunting in Scandinavia.

THE fox is possessed of great passive courage, as is evidenced from his always meeting death without uttering even a groan. By the following anecdote it would, indeed, seem that occasionally this animal becomes the attacking party.

"At the end of last November," writes M. Wennerström, "I killed a female crossed-fox. When the shot was fired, which took effect in her hind-quarters and broke the left thigh bone, she made for a thick alder-carr near at hand, where the dogs soon came up with her. The first one that attacked her she bit so severely that he ran off yelping without daring to go near her again. The other, however, grappled with her in good earnest, and their jaws became locked together in such a manner that they could not separate. The plaintive cries of the dogs having informed me where they were rolling over

one another, I hastened to the spot, and struck the fox several times over the head with my gun-stock to make her quit her hold, which had at length the desired effect. In the hurry I tripped against a Tufva, or hillock, in the deep morass, and fell to the ground, and at the same moment the beast attacked me; but as I fortunately had the gun in my right hand, I immediately drove the stock between her jaws, and thus kept her so far away from my body that I was enabled to seize her by the throat with my left hand, and thus to suffocate her. This shows of what daring a wounded fox is capable of carrying it so far, indeed, as to venture to attack the sportsman himself. Before I fired, the dogs had driven her for about two hours in the morning, in which while she had several times attempted to make resistance. She was the largest fox I ever saw, measuring from the point of the nose to the tip of the tail three feet eleven inches, and weighing fully seventeen pounds."

The fox is cunning to a proverb; but if we are to believe a hundredth part of the stories told of him in Scandinavia, not only by ancient, but modern authors, he must be possessed of almost human intellect. Olaus Magnus tells us, for instance, that to obtain access to the honey of the wild or the bumblebee, as also to the young of the wasp, Michel makes apertures in their nests, into which he introduces his long, hairy tail; and when this is fully covered with the angry insects he runs with all speed to the nearest tree or bush, against which he strikes it violently, for the purpose of destroying them; or, if there be water in the neighbourhood, he casts himself therein, and thus drowns his troublesome followers;—that when he has not wherewithal to satisfy his hunger, he, after rolling himself in red earth, thereby to acquire a bloody appearance, stretches himself out at length, distends his tongue, and holds his breath, that magpies and other birds of prey, fancying him to be dead, may approach the supposed carrion, but as soon as they are sufficiently near he seizes and devours them ;-that when caught in a steel-trap, and unable to effect his escape by gnawing off his leg, he counterfeits death, so that when released from his fetters by the hunter he may take to flight;-that when hungry, he plays, so to speak, with the hare, until such

time as he has lured her within his reach, when he pounces upon and devours her:—that when pressed by dogs he often escapes by imitating their bark, as also by suspending himself to the branch of a tree;—that at other times when, during the chase, he meets with a flock of sheep or goats, he jumps on to the back of one of the number, and allows himself to be carried off by the poor animal, which, frightened at the unusual burthen, exerts its utmost speed; and owing to the other goats following in the track of their companion, the sportsman, fearing that the flock should be scared out of their wits and injure themselves, is compelled to call off the dogs;-that when he wishes to feast on a hedgehog, for which animal he has a great liking, but which, when rolled up into a ball-its formidable prickles protruding on every side—he would otherwise be unable to molest, he, with his fore-feet, turns the victim on its back, and then inundates its eyes and nose with urine; the pungent nature of this soon causes the poor creature to unroll, and it thus falls an easy prey to its wily enemy.

The body of the fox—according to the same authority—is possessed of healing virtues. People who are afflicted with the gout are cured, we are told, by tying a piece of fox-skin about their legs. The fat is beneficial to those who suffer from rheumatism in the ears and limbs. The pigment is good for the gripes and all other complaints; and if the brains are frequently administered to an infant, it will afterwards walk firm on its legs.

Pontoppidan has also some marvellous stories about the fox. "When he wants to get rid of fleas without trouble," so the worthy Bishop tells us, "he takes a bunch of moss or straw in his mouth, and goes backwards into the water, wading by slow steps deeper and deeper, by which means the fleas have time to retire gradually to the dry places, and finally to the part of the neck and head which he alone keeps above water; and to crown the work, he gathers all his enemies into the aforesaid bunch of straw, and then drops them in the water, and runs away well washed and cleaned. This project is so cunning that mankind could not teach him better. The long bushy tail, with which nature has not supplied him in vain, he uses in Norway, amongst other purposes, to catch crabs and

crayfish. They are fond of anything hairy, and generally will lay hold of it, by which means he draws them ashore. When he observes the otter fishing, he hides himself behind a stone, and when the otter lands to eat his prey, he comes upon him by a quick and high leap, that the otter, who otherwise fears not the fox, is startled, and leaves him the booty. A certain person was surprised on seeing a fox near to a fisherman's house, laying a parcel of cods' heads all in a row, and could not conceive what he was going to do, till he saw that he hid himself behind the embankment, and made a prize of the first crow that came for a bit of them. "When a she-fox is pursued by dogs," the prelate informs us in conclusion, "and that they come pretty near her, she deluges her tail with urine, and whisks it in their eyes, which makes them smart, and then she escapes."

We are also told that "the fox often converts the badger's den into a habitation for himself; but as he is unable to take possession of this by force, he resorts to stratagem to effect his purpose. When the badger is absent, he repairs to his quarters, where he commits all sorts of dirty practices. These he repeats at intervals, until the olfactory nerves of the poor badger can stand it no longer, and as a consequence he is obliged to seek another abode." And farther, that "in the vicinity of the North Cape, where the precipices are almost entirely covered with sea-fowl, the foxes proceed on their predatory expeditions in company. Previous to the commencement of their operations, they hold a sort of mock-fight upon the rocks, in order to try their relative strength. When this has been fairly ascertained, they advance to the brink of the precipice, and taking each other by the tail, the weakest descends first, whilst the strongest, forming the uppermost and last in the row, suspends the whole number, till the foremost has reached their prey. A signal is then given, on which the uppermost fox pulls with all his might, and the rest assist him as well as they can with their feet against the rocks. In this manner they proceed from rock to rock, until they have provided themselves with a sufficient supply."

Foxes, especially those near to the coast, prey, as is known, much on water-fowl, in approaching which their movements

are stealthy and cunning in the extreme. It is asserted, for instance, by fishermen and others, who have ample opportunities of watching their manœuvres, that whilst wading in shallows towards the fowl, Michel is careful when lifting his paws above the surface, to lick them dry before re-immersion, in order that the quarry may not be disturbed by the noise of the water dripping from them. In England we occasionally hear of Reynard, when hard pressed, taking shelter in ivy-covered walls, or, it may be, in pollard-oaks. But in Sweden there are instances on record of his fleeing for safety to the upper branches of lofty trees. To some this may seem fabulous, but the fact is perfectly well attested.

"When the weather is severe," Olaus Magnus tells us, "and that the fox famishing with hunger, comes near to dwellinghouses, he imitates the bark of the dog, that domestic animals may be induced to approach him with the more confidence." This story, incredible as it may appear, would almost seem to have some foundation. "During the past autumn," says M. Ekström, "a son of mine proceeded one evening at sunset to shoot ducks in a small lake nearly overgrown with rushes. But he had not yet reached the water when he heard the fowl quacking and flapping their wings, thereby evidencing the presence of some intruder. When, however, with the intention of getting a shot, he had cautiously advanced near to the spot where the turmoil was going on, not a bird was to be seen, they being all concealed in the long grass. But in lieu of ducks he discovered a fox, the cause of the disturbance, wading through the rushes, and now and then making a spring at such ducklings as came near to him. He, however, often remained motionless, as if listening, and when all was quiet, he would utter a hoarse cry, which in great degree resembled that of the old duck, when she calls together the brood. And in this way it was not long before Michel succeeded in enticing towards him, and capturing a duckling. With the prize in his mouth, he was approaching the strand, when the young sportsman, not having patience to watch the fox's farther proceedings, levelled his gun and shot him dead on the spot. And thus the cunning rogue, with the loss of his life, paid the penalty of his ruse. The fox proved to be a

very old male, which, either in combat with his fellows or during some one of his marauding expeditions, had lost his right eye."

"When a youth," M. Ekström informs us, "I myself was once an eye-witness to the cunning of the fox. In an inlet of a lake, covered for the most part with high reeds, there were several small openings called flukor—free from grass. In these, which were frequented by great quantities of small fish, the peasants from the neighbouring village were accustomed to lay out nets, and as from the confined space it was not practicable to use even an ekstock or punt, one end of the net was always fastened to the shore. During the summer time I myself was almost every evening in the habit of resorting to this piece of water for the purpose of shooting the young ducks, which towards dark left the shelter of the high reeds and repaired to the flukor to feed. But, in the first instance, I always repaired to a neighbouring eminence, which overlooked the water, to ascertain the whereabouts of the birds. One evening, just before sunset, when, according to custom, I had stationed myself behind a thick juniper bush at my observatory, I saw a fox squatted near to the edge of one of the flukor, having before him nearly the half of a net, which had been drawn thus far out of the water, and from which he was plucking several small fish. At first I supposed the peasant who owned the net had himself so placed it to dry. and therefore paid little attention to the matter. But having from necessity become a passive spectator to his movements (the spot being much exposed preventing me from approaching within gunshot) I had soon cause to alter my views on this point. For when all the fish in that portion of the net that was on shore were devoured, I saw Michel, to my no small wonderment, act the part of fisherman himself. Seizing the cork line between his teeth, and rearing himself upon his hind legs, he retreated backwards, and thus actually succeeded in drawing the residue of the net partially to the strand. When, however, the cunning fellow observed any fish entangled in the meshes, he would drop the line and at once pounce upon his prey. Astounded at what I had seen I now made the best of my way to the village, which was close at hand, for the purpose of procuring a person to scare the fox from the spot, and to drive him towards the point where I purposed placing Luckily, I met with the chief inhabitant myself in ambush. of the place—the Härads-domare—and informed him that he had a fisk-tjuf, or fish-thief, who plundered his nets. On hearing this the old man immediately cast away his axe, armed himself with a stout stick, and requested me, as being the more fleet of foot, to assist him in securing the culprit. cautiously proceeded together to the juniper bush, from whence I had just seen Michel. The Domare, who, beyond doubt, cogitated as to the § of the Missgernings Balken (Criminal Code), on the strength of which he should summon the trespasser, was not a little disconcerted when he got sight of the thief in person. But he presently burst out into so loud a laugh that Michel took the alarm, and ran off at full speed for the nearest wood, where he in his turn might laugh equally loud, as well at the student's gun, as the Domare's law book."

Dr. Levin, of Säther in Dalecarlia was also an eye-witness to the way in which the fox, when sharp set, procures a din-"In January of this year," says that gentleman, "I saw a ridiculous proof of the cunning and calculating powers of When on a journey, I observed at about one hundred and fifty paces' distance, in an open and extensive field, a large fox, standing with his nose inclined downwards, and evidently speculating on something beneath the snow. I stopped the vehicle, and having my rifle, I put it in order, and made an effort to get within shot of him; but from the great depth of the snow, I was soon obliged to give up the attempt. pondering whether I should fire at so great a distance or not, I observed my wily friend suddenly to leap six or eight feet nearly perpendicularly into the air, and come down, head foremost, with such force that he was buried up to the shoulders. Whilst performing this feat, his tail and hind-legs dangling, he presented so extraordinary an appearance, that I could not refrain from laughing. The cause of this singular manœuvre is hard to say; but the probability is, either that he heard or scented some living animal, such as partridges, or rats, beneath the snow, which he cunningly calculated might be captured by a coup de surprise; whereas, if attempted to be got at by the

slower process of burrowing, it would probably in the meanwhile make its escape. But whether he succeeded in getting hold of anything on this particular occasion, I could not observe, owing to the distance."

"A certain Jägare," we are again told, "who was one morning keeping watch in the forest, saw a fox cautiously making his approach towards the stump of an old tree. When sufficiently near, he took a high and determined jump on to the top of it, and after looking around awhile, hopped to the ground again. After Reynard had repeated this knightly exercise several times, he went his way; but presently he returned to the spot, bearing a pretty large and heavy piece of dry oak in his mouth; and thus burthened, and as it would seem for the purpose of testing his vaulting powers, he renewed his leaps on to the stump. After a time, however, and when he found that, weighed as he was, he could make the ascent with facility, he desisted from further efforts, dropped the piece of wood from his mouth, and coiling himself upon the top of the stump, remained motionless as if dead. approach of evening, an old sow and her progeny, five or six in number, issued from a neighbouring thicket, and pursuing their usual track, passed near to the stump in question. Two of her sucklings followed somewhat behind the rest, and just as they neared his ambush, Michel, with the rapidity of thought, darted down from his perch upon one of them, and in the twinkling of an eye bore it in triumph on to the fastness he had so providently prepared beforehand. Confounded at the shrieks of her offspring, the old sow returned in fury to the spot, and until late in the night made repeated desperate attempts to storm the murderer's stronghold; but the fox took the matter very coolly, and devoured the pig under the very nose of its mother, who at length with the greatest reluctance, and without being able to revenge herself on her crafty adversary, was forced to beat a retreat."

The notion is very generally entertained in Sweden that the fox seldom commits serious depredations in the vicinity of his breeding-place; arguing, it is presumed, that were he to thieve at home, the hue and cry would sooner be raised against him. It is moreover said, that he often makes a distinction between the property of the owner of the soil where his earth is situated, and that of others.

"For a long period," says Ekström, "a brace of foxes annually bred in a little wooded knoll near to where I was born; and although my father was a very keen sportsman, he never molested them in any way, nor would he permit me to injure them. The consequence was, that during a space of twenty years not a single head of poultry was carried off by them from our property. They were, moreover, not unfrequently seen to capture young wild ducks in the same little river daily resorted to by our geese and ducks, which they never harmed in any way."

"A bitch-fox," Ekström tells us again, "had littered in a Hage, nearly midway between two villages, about a mile apart. When the cubs began to require food, the old fox never touched any animal belonging to the proprietors of the Hage in which they had pitched their tent, but they plundered the other village, not only of all the poultry, but when these failed, of sucking pigs and lambs also. Now, although Michel had certainly not sufficiently studied the map of the country as to know on whose ground he had taken up his abode, it is nevertheless very remarkable that he would at all times be satisfied with lean lamb, if provided at the cost of the enemy; although fat geese and other delicacies, had he so willed it, were always readily obtainable in the village of his friends.

"In another instance, where two large estates were managed by the same Inspector, who was also a sportsman," Ekström goes on to say, "a fox had littered in a sand-hill. This gentleman, during his daily rounds, had not unfrequently observed her; but for a while he would not have her disturbed, as well because she never in any manner molested the numerous turkeys and geese that daily fed in the vicinity of her abode, as that her cubs were as yet too small to be of any use. At last, however, the time arrived that Michel's skin should be made to pay for his quarters, and a Chasse was in consequence got up; but it proved a failure, and she went off entirely unscathed. The next day some people were set to work to dig out her earth, when two of the cubs were killed, and a third captured alive. This the Inspector carried home

and in the evening secured him with a chain to a tree, immediately in front of, and near to his own bed-room window. On the following morning, at an early hour, a person was directed to ascertain how Michel fared. He was found to be not only alive and well, but the strange apparition of a headless turkey was observed lying beside him. The girl who had care of the poultry was forthwith summoned to the presence, and on being questioned, confessed, with tears in her eyes, that having been at the 'digging out' on the preceding day, she, on her return home, had neglected to secure her charge, and the consequence was somewhat serious, for on search being made, thirteen other turkeys, concealed some in one place and some in another, were found to have paid the penalty of their lives. had beyond doubt been killed by the mother of the cubs, and as it would really appear, out of revenge for the destruction of her offspring; for, prior to this period, neither the turkeys, nor other of the poultry, had been in any way molested during that particular summer."

If the following story is to be believed, sudden fright would seem to act as a drastic dose as well on foxes as on bipeds. "In a small town, where the police were not very rigid, and the fowls were allowed to walk about the streets undisturbed, it happened during the past summer that one or more of these feathered beauties daily disappeared. The virtuous wives of the burghers waited unavailingly the return of their favourites; but these not making their appearance, a strict eye was kept on the remainder of the hens, and it was soon discovered that a fox was the depredator—that he collected them together, not to adorn his seraglio, but for his larder. As legal proceedings in this case could not be resorted to, the owners of the fowls addressed themselves to the Jägare of the place, with the prayer that the detected thief might for his misdeeds be made to pay the forfeit of his life; and in consequence of their pressing solicitations, a mechanic, thinking thereby to win the favour of all the old ladies, as also that his Monday's holiday could not be better employed, volunteered to act as executioner. With this motive he put his gun in order, and betook himself to the spot where the fox was wont to pass. Here he concealed himself in some long grass at the

back of a high Gärdesgård, and in anxious expectation awaited the animal's appearance. Unluckily, however, it so happened that the watcher himself presently fell into a profound slum-The fox, on the contrary, who, except on befitting occasions, is seldom found napping, meanwhile pursued his usual track to the town; but when, with the intention of crossing the fence in question, he had leapt on to the top of it, and beheld his sleeping enemy, he was obliged to take a terrific spring, in order to clear the body of the man. This violent exertion, coupled with panic, was attended with disastrous consequences to the unfortunate Jägare: for, whilst Michel was vaulting through space, he discharged such a volley of disagreeable matter full into the face of our friend, as not alone to rouse, but so to blind and bewilder him, that he was unable to fire at the retreating foe. And it, moreover, compelled him to return home forthwith to perform the needful ablutions-the laughing-stock of everybody."

Foxes, from their numbers, are very destructive in Scandinavia, and many kinds of devices are in consequence employed to destroy them. They are the more sought after from their skins being now somewhat valuable, more so, indeed, than those of the wolf; for when the animal is full grown, they fetch from eight to ten shillings each. The chief market is Russia, where, for the use of the military, they are much in demand.

Some foxes are killed in skalls; but probably because those animals hide themselves in the clefts of rocks, or other inaccessible places, the number captured by this means is not very considerable. Even at the great bear and wolf hunts spoken of, though frequently embracing a very considerable extent of country, it seldom happens that more than two or three foxes are killed.

Many foxes are hunted to the death with dogs in the peninsula. The sportsman, however, does not as with us follow the dogs on horseback—the style of fence and broken nature of the ground effectually preventing one from riding across the country—but on foot. Several individuals, each armed with a gun, usually take part in these hunts, which to a man of active habits, and with a good knowledge of the ground, are very exciting. The fox is in many instances shot, but it

more generally happens, that when he finds himself hard pressed, he takes refuge in his earth, or some other out-of-the-way place, where the difficulty of dislodging him is considerable.

On these occasions, the dogs are at times endangered. We are informed by M. Wijkström, for instance, that "at a foxchase, near to Donafors Bruk, in the province of Nerike, it happened that Michel sought shelter in the cleft of a rock, where he was followed by the dogs, who all, with one exception, fortunately succeeded, when called off, in making good their retreat. But this one from its superior size, and the confined and crooked nature of the aperture, was unable either to turn himself, or to back out. His growls and barking as he fought with the fox were distinctly heard; but as for two or three days afterwards all was quiet, it was imagined the dog had perished. Nevertheless, after the lapse of three days and a half, the fox was found torn and dead on the outside of the aperture, and it was therefore surmised that the dog survived. This proved to be the fact; for, though dreadfully emaciated, and badly wounded over nearly the whole of his body, one side of which was entirely stript of hair, he contrived to crawl home. By prudent management, however, and by feeding sparingly at first, he recovered his strength, and after a time was as good for fox-hunting as ever."

## CHAPTER XXVIII.

The Hare in Scandinavia—Shooting Hares in Winter-time
—Characteristic Features of the Scandinavian Hare—
Beating for Hares—Good Sport—A Three Days' Chasse
—The Hare not Hunted on Horseback—The Scandinavian Hare not the same as the English—Fond of Music
—Extremely prolific—Easily domesticated—Hare-hunting the popular amusement of the Country.

IMMEDIATELY after Christmas, Mr. Falk made up a little party, including myself, to shoot hares, of which there was a fair

sprinkling throughout the surrounding forest. That gentleman, had, as I have said, a good many beagles, and we therefore anticipated some amusement. But before I proceed to detail our proceedings, it may not be out of place to say a few words regarding the animal we were in pursuit of.

The hare is to be found all over Scandinavia, as well in the more southern provinces of Sweden as in the mountain regions of Lapland and Norway. Like several other animals, however, indigenous to that peninsula, he is said to attain to a larger size in the southern than in the more northern districts. His predominant colour is grey in the summer, the shades varying more or less according to the season of the year, and the latitude in which he is found; but in the winter, with the exception of his ears being tipped with black, he is white, or very nearly so. This is universally the case from Scania, the most southern of the Swedish provinces, to the North Cape.

In the summer season, the Scandinavian hare subsists in much the same manner as our own; but in winter, when the ground is deeply covered with snow, and when he has a difficulty in getting access to vegetable substances, he feeds for the most part on the rind of trees. He is particularly fond of that of the Aspen, Sallow, and Willow. It is said that during the summer, when the hare is in his seat, his head is always towards the north; but in the winter, the reverse is the case, for the animal then faces towards the south. This is supposed to be in consequence of his wish to avoid the scorching rays of the sun at the former, and the cold north winds at the latter period of the year.

To proceed. We threw off in the first instance near to Acksjon, a fine lake, situated at about six or seven miles to the north-east of my quarters. Here we slipped about half the hounds from their couplings, keeping the others in reserve, that they might not all tire at once. We then formed a line, and beat the country before us. To assist the dogs, however, in getting poor puss from her seat, we made all kinds of discordant noises. For this purpose a soldier, who was of our party, occasionally kept tat-tat-tooing upon an enormous drum that he carried before him; another repeatedly discharged a large horse-pistol; whilst others again made abundant use of

rattles, similar to those of our watchmen: these sounds, together with our shouts, were enough to alarm the whole country.

A hare of course was soon on foot with all this uproar. When, therefore, we heard the music of the hounds, we separated, and stationing ourselves in paths and other places where it was probable she might come, we soon succeeded in waylaying and shooting the poor animal. The death halloo was then given by the successful sportsman to collect our scattered party. A singular operation was now performed: the head of the hare, with the exception of the ears, which remained attached to the skin, was severed with a knife from the body. The only reason I could ever hear alleged for this most strange custom, which is universally adopted throughout Sweden was, that if a woman in a state of pregnancy was to see the head of the animal, her offspring would inevitably have a hare-lip. On one occasion, indeed, that I brought a hare, which had not been decapitated, into a house, where there was a young female enceinte, the poor creature was so much distressed at the sight, that to relieve her apprehensions I was obliged to take an axe and cut off the head of the animal.

Our game being bagged, we again formed a line, as in the first instance, and beat the country before us. In the course of the day we found several hares, some of which escaped, whilst the chase of others afforded us a good deal of diversion before they were killed. We had one great advantage over the hares on this occasion, for the ground being in most places bare of snow, and those animals perfectly white, they were of course perceivable at very long distances. Towards evening we reached a cottage situated on the western face of a hill, overlooking the Knon, which we made our quarters for the night. We had abundance of provisions with us, and we now enjoyed a hearty repast. As beds, however, were not procurable, we littered down a quantity of clean straw upon the floor, and thus, with our knapsacks for our pillows, we reposed until morning. This chasse continued altogether for nearly three days, during which twenty-four hares were bagged. Though a vast extent of country was beaten on this occasion, very little game of any other description was met with.

Hunting on horseback, in the English fashion is, I believe, rarely or never resorted to in Sweden, the hares being most commonly killed in a similar manner to that of which I have just made mention; but when coursing—an amusement confined almost solely, I believe, to Scania—the sportsmen occasionally make use of horses. I subjoin some remarks of Mr. Greiff's, relating as well to the chasse as to the natural history of the hare in that country.

"The hare-hunt, with the harriers so called, or the common hounds, is one of the pleasantest sports; but if you do not wish to be deprived of it in course of time, you ought not to prosecute it at all seasons of the year. It is true that the female brings forth young three times in the course of the summer, and has seven to eight young each time; but the mother's indifference for her young, and the many kind of persecutions they are subject to, are the cause that few grow up. Besides man, who shoots and catches, the hare's enemies are the wolf, fox, dog, cat, eagle, eagle-owl, hare-owl, and hawks In wet and rainy weather, midges and of different sorts. insects fasten themselves about the eyes of the young hare, and inflame them so, that worms are bred and entirely consume him. In winters when there is not snow upon the ground, his white skin betrays him. From March to August, the hunting of the hare should be followed with moderation. A prudent and old sportsman never shoots the female at that period; and if a few males are shot it does no harm. The female is generally larger, carries herself higher when she runs, makes small bounds, and squats often. The male is little, runs low, and makes wide bounds.

"It is asserted that old male hares kill the young ones; but I believe the case is the same with this as with other animals, that when any of them has got a good station, the strongest drives the weakest from it. In the spring it is easiest for the dogs to get them up, and as the males ramble both night and day, one can often find four or five with one female. About Midsummer is the most difficult time to find them, when the juniper bush is in bloom, and all flowers throw out such a strong scent that it is not easy for the dogs to wind them. The hare also does not require to go far for food. I have

often seen by the dew in the fields, and in the wood, that he has not moved ten steps round about, when he has hit upon buckbean (wattwäppling) or any other palatable food. autumn and winter the hare sits close; but in October and November the dogs can easily enough get him up. It helps, as they say, to get the hare on foot by shouts, shots, and rattles. One may very well use five or six, or even a greater number of dogs. In autumn the hare frequents the open country, and grounds covered with small juniper bushes; and when the snow falls it sits sometimes in the snow-drifts, and in the furrows of corn-fields. When it is hard weather it will remain two or three nights without going from its seat. During a thaw it sits often on stones and in open places, but in severe cold in thickets and bushes. The hare is caught with snares in fences, or with the usual gins in woods and hedges. Roasted, it—especially a young hare—makes a good dish at table."

"I was once," Mr. Greiff says, "at a hunt, when a female hare was shot, on opening of which seven young ones, all alive, were found, and cast to the dogs. A bitch which had lately pupped, took one of the young ones, laid it in a bush, and licked and dried it; and we sportsmen had a difficulty to get it from her, as she constantly licked and caressed it, as if she wanted to give it suck. It was carried home and fed with milk. Eight days afterwards it was killed, by an unlucky accident, to the great mortification of all the hunting party."

In the summer season the Scandinavian hare is not dissimilar in appearance to the hare common to Ireland; and, in the lower parts of the country, it is fully as large as ours in England. Although the female is generally somewhat larger than the male, there is little or no perceptible difference between the sexes. Experienced sportsmen affirm, however, that when this animal is chased by the dogs it can be readily distinguished; the ears of the male at such times always pointing forwards, whilst those of the female, on the contrary, lie backwards on the neck. Both sexes are commonly of superior size in the southern portion of the Scandinavian peninsula, attributable, probably, to a greater abundance of food and a more genial climate.

The Lepidus timidus, Linn. (according to English naturalists), the hare common to England, is not found in Scandinavia. Queen Louisa Ulrica of Sweden, who flourished about a century ago, caused a considerable number of hares of that species to be turned out near to the palace of Svartsjö, in the province of Upland, but the change which time and climate, or both have effected, has made them undistinguishable from the hares of the country. Accidental varieties are, however, by no means uncommon. Those of a reddish colour are occasionally met with, as also Albinos. A friend of mine, Lieutenant Uggla, indeed, shot not many years ago one of the latter, the eyes of which were blood-red. Black hares have likewise been occasionally killed in the peninsula, principally, I believe, in the southern provinces of Sweden. But these, as wearing the "Devil's livery," are, by the superstitious, supposed to be förtrollade, or enchanted, and capable of effecting mischief in every way!

According to Linnæus, the hare is a great lover of music, attributable to his long ears, and says, that if the animal comes over a board, or other sounding substance, he beats it with his fore-feet, lifting them up alternately, and with such rapidity, that the eye can hardly follow the motion. Hence, he is said in Sweden,—"att slå på trumma," that is, to beat the drum. The noise made by the animal somewhat resembles that elicited from the instrument in question.

The fur of the hare is not only valuable in itself, but is used, the great Swedish naturalist tells us, as a flea-trap by the Dalecarlian peasant-girls, who, observing that those vermin are fond of creeping into it for warmth and shelter, wear a klot, or ball, formed of that material, about their persons. "In places where fleas abound," he adds, "travellers will do well to place a similar klot in their beds."

The hare pairs early in the spring, the period being somewhat dependent on the latitude and the state of the weather. Although several male hares—ramblers, or dancing-masters, as they are jocosely called in Sweden—often follow the female at this season, her favours are believed to be bestowed on one alone. The males, especially the old ones, fight desperately on these occasions, and the strongest always carry the day. The

female is very prolific, having three broods within the year; the first about March or April, the second near to Midsummer, and the third in August. Each brood generally numbers from three to five, but she has been known to have as many as seven young ones at a time. The female forms no regular bed for her progeny, and only visits them occasionally. It is supposed she suckles them for about three weeks, and then leaves them to shift for themselves. It is well the hare is so prolific, for the young are not only exposed to very numerous enemies, but the mother, by all accounts, is the worst of nurses, and very many of the leverets perish consequently from inattention. There is an old saying in Sweden, so Ekström tells us, and one not altogether without foundation, that "the larger portion of the first brood are frozen to death, the greater part of the second brood live, and the third brood are mostly destroyed by ants and other insects."

Hares are believed to pair within a few months of their birth, and of course long before they have attained to their full growth, which is not supposed to be until they are a year or fifteen months old. Captain Littorin tells us, for instance, that one of his acquaintance—having first ascertained there were no previous occupants—turned out two leverets of the first, or spring brood on to a certain island, three miles distant from the mainland. In the autumn he shot not only these two hares, which were marked on the ear, but three young ones in addition.

The fact of the female hare pairing within a very few days after she has littered, is curious enough; but that when already pregnant she should be capable of new conception, as asserted by many to be the case, is passing strange. Though this has been a mooted point with naturalists for ages, it seems not yet fully solved. Nilsson, when alluding to the subject in the last edition of his "Fauna," though he does not commit himself in any way, nevertheless says: "From my own experience I am unable to testify to such being the fact. But a sportsman, whose veracity I cannot doubt, has assured me that he once shot a gravid female hare, and found, on opening her, five full-grown young ones in the one sack of the womb (the latter, as with all *Rodentia*, being divided into two) and four in

the other, which were not larger than the joint of one's thumb. Another of my acquaintance shot, on the 7th of December some years ago, a female hare which had four young ones within her, of which two were small, and still naked, whilst the other two were large and hairy."

The question as to whether the hare be a ruminant animal or not is also still mooted in Sweden. Linnæus tell us that such is the case, though in an inferior degree to the *Pecora*, which have a stomach of four cavities, whereas the hare has only two; that the hare macerates the food in one cavity and digests it in the other. There are those who entertain the same opinion as Linnæus, but others again do not admit that the hare chews the cud, or has two cavities in the stomach.

As hares are shot all the year round in Sweden, it oftentimes happens that the young are taken alive from the stomach of the dead parent. And it would seem from what follows, that even under such untoward circumstances they might, if needed, be reared without difficulty. "On the 1st of June, 1828, says M. Jennische, "I killed a female hare, and as the shots went through her heart and lungs, she died on the spot. Without giving the dogs their regular due—that is, the head and entrails-I carried her home, a distance of upwards of two thousand feet, and there caused her to be opened, when, although her legs were stiff, and her whole body all but cold, two young ones were found alive in her womb. And what is more singular still, they lived for three days afterwards. As I looked at my watch when the hare was shot, as also when she was opened, I can vouch for the fact that a young hare can live in the dead mother for seventeen minutes at the very least."

An instance was recently given of a fox not only living, but thriving on his stumps, both of his fore-legs having been lopped off in a steel-trap. A somewhat similar circumstance is related of a hare. "During the first Spår-snö, or tracking-snow, this winter," says M. Littmark, "my dog caught a hare, both of whose fore-legs were broken (probably by shot, a few weeks previously) just below the knee. The leg-bones, some two inches in length, which were almost altogether without hair, and to which were hanging splinters of bone in a very

blackened and decayed state, served her for feet; in other respects, and though very lean, she was uninjured. This goes far to show in what a miserable state the hare can continue to exist and feed herself."

If taken quite young, the hare may be easily domesticated, and will follow her master like a dog. Witness Cowper's three favourites, Puss, Tiny, and Bess, of which the poet has given us so very interesting an account. But to make these animals perfectly docile, they must be allowed, so to speak, the run of the house, to which arrangement, however, from their offensive smell and dirty habits, few people have a fancy. When domesticated, the hare has many amusing tricks. myself have kept considerable numbers of hares, on one occasion near a score; but they were never permitted their full liberty. They evinced great pugnacity, and at times cruelly mangled one another. When clad in their winter garb, they were very beautiful; and considering they would be ornamental in our parks, I sent several to England, where, however. I have reason to believe, they all soon died.

Hares are destroyed by various means in Scandinavia, which differ somewhat in the several districts. Many are captured in snares. "These ought to be made," so Ekström tells us, "of fine copper wire; but previous to being gillrade, they should be well rubbed over with the fresh leaves of the spruce-pine; for however stupid the hare may seem to be, he will never go into a snare that has been touched by the bare hand."

When speaking on the subject, the reverend gentleman mentions a curious incident. "My father," says he, "once shot a very old male hare, whose appearance would have led one to suppose he had worn stays all his life. As a boy, I was accustomed to follow as Last-bärare—literally, load-bearer—in other words, to carry the game. It was my office besides to disembowel the slain; but when I attempted to rip up the hare in question, the knife would not penetrate the skin. On nearer inspection it was found that the animal had a thick copper-wire snare about its loins, that had actually grown into the flesh, from which cause it had obtained its fashionable and singular shape."

The steel-trap is also had recourse to in some places for the capture of the hare, more especially in the far north; but only, I believe, in the winter time, when the ground is covered with snow. The trap is of less size than that used for the fox, and is not baited in any way, being merely placed in the runs of the hare, and afterwards well covered with snow.

More hares, however, are probably killed with the assistance of dogs than in any other way. Har-jagt, or hare-hunting (in so far as field-sports are concerned), is, in fact, the popular amusement of the country. Several individuals frequently take part in the Chasse, which, from the difficult nature of the ground, is always conducted on foot.

## CHAPTER XXIX.

The Capercali—Found in most parts of Scandinavia—Its
Food and Breeding Habits—Size and appearance—Occasionally breeds with the Black Game—Often domesticated
—Will sometimes attack People—Shooting in company
with a Dog—How it is done—Winter-time the most suitable—Shooting Capercali by Torchlight—The Love Song
of the Capercali.

In the course of excursions that I made into the forest, towards the autumn, I frequently shot the capercali. It is supposed that this beautiful bird was an inhabitant of the British Isles within the last century, and seeing that it has again, to some extent, been introduced into Scotland, the few particulars I am now about to give regarding them may not be altogether uninteresting. To describe their form and plumage would be superfluous, as they are now to be met with in the shops of most of the London-poulterers.

It is to be found in most parts of the Scandinavian peninsula—indeed, as far to the North as the pine-tree flourishes, which is very near to the North Cape itself. Those birds are, however, very scarce in the more southern of the Swedish provinces. The favourite haunts of the capercali are extensive fir-woods. In coppies, or small cover, he is seldom or never to be found. Professor Nilsson observes, that "those which breed in the larger forests remain there all the year round; but those which, on the contrary, breed on the fjäll sides, or in a more open part of the country, in the event of deep snow, usually fall down to the lower grounds."

The principal food of the capercali when in a state of nature, consists of the leaves of the Scotch fir. He very rarely feeds upon those of the spruce. He also eats juniper-berries, cranberries, blueberries, and other berries common to the Northern forests; and occasionally also in the winter-time, the buds of the birch. The young capercali feed principally at first on ants, worms, and insects. The hen makes her nest upon the ground, and lays from six to twelve eggs; it is said she sits for four weeks. Her young keep with her until towards the approach of winter; but the cocks separate from the mother before the hens.

The capercali lives to a considerable age; at least so I infer from the cocks not attaining to their full growth until their third year or upward. The old ones may be easily known from their greater bulk, their eagle-like bill, and the more beautiful glossiness of their plumage. The size of these birds, I have reason to suppose, depends in a great degree on the latitude where they are found. In Lapland, for instance, the cocks (the hens being much smaller) seldom exceed nine or ten pounds. In Wermeland and adjacent parts again, I have never heard of their being killed of more than thirteen pounds; whilst in the more southern provinces of Sweden (and I have three several authorities for my statement), they have not unfrequently been met with weighing seventeen pounds and The hen capercali usually weighs from five to six upwards. pounds.

As with other birds, occasional varieties in plumage are to be found; indeed, I have a drawing by me at this moment, representing a hen that was shot in one of the southern provinces of Sweden, during the autumn before last, which, with the exception of a few grey feathers on different parts of the body, was perfectly white: this bird had several young ones,

the plumage of all of which, however, was of the usual colour. The capercali occasionally breed with the black game; the produce of which are in Sweden called Racklehanen: these partake of the leading characteristics of both species. But their size and colour greatly depend upon whether the connection was between the capercali cock and the grey hen, or vice versa. Out of twenty Racklehanar, which is the male, two, according to Mr. Falk, are not alike; and the difference of colour observable among the Racklehānan, which is the female, but which are very rare, is still greater. Racklehanen are very seldom to be met with. During my stay in Wermeland, however, Mr. Falk had two of these birds in his possession, and I myself shot a third.

It is a pity that more serious attempts are not made to introduce the capercali abundantly into the United Kingdom, for, if the experiment was undertaken with judgment, it would most probably be attended with success; the climate, soil, etc., in Scotland, at least, not being very dissimilar, in many respects, to the south of Sweden. In Scotland, besides, independently of the natural forests, there are now considerable tracts of land planted with pines, from which trees, when the ground is covered with snow, those birds obtain nearly the whole of It is true that capercali have been introtheir sustenance. duced into this country from Scandinavia, though, from some cause or other, and nothing more likely than over or improper feeding, these attempts in general have not met with the amount of success looked for. But the experiment, to have a probability of success, should be made with a more considerable number of birds; and then not entrusted to an ignorant person, but one fully conversant with their habits. This I recommended some years ago to the Duke of Gordon, to whom I am under some obligation; but his Grace declined acting upon my suggestion, on the ground of there being too little wood in that part of Scotland where his estates are situated. Had this plan been adopted at the period I speak of, it is not improbable that at the present time there might have been a very fair sprinkling of those noble birds in the Highlands.

It is often domesticated in Sweden; indeed, at both Udde-

holm and Risäter, as well as in other places, I have known those birds to be kept for a long period in aviaries built for the purpose. These were so perfectly tame as to feed out of the hand. Their food principally consisted of oats and of the leaves of the Scotch fir, large branches of which were usually introduced into their cages once or more in the course of the week. They were also supplied with abundance of native berries, when procurable. They were amply provided at all times with water and sand, the latter of which was of a rather coarse quality, and both were changed pretty frequently.

It has been asserted that the capercali will not breed when in a state of domestication. This is altogether a mistake; repeated experience has proved the contrary. Indeed, a few years ago, I procured a brace of those birds, consisting of cock and hen, for a friend of mine. After a lapse of a few months the hen laid six eggs, and from these, in process of time, six capercali were produced. The chicks lived until they had attained a very considerable size when, owing to the effects, as it was supposed, of a burning sun, to which they had been incautiously exposed, the whole of them, together with the mother, died. On this mishap, the old cock, the only survivor, was turned loose into the game preserves, where he remained in a thriving condition for about a year and a half. At last, however, he also met his doom, though this was supposed to be owing rather to accidental than natural causes.

In farther corroboration of the fact that the capercali will breed when in confinement, I make the following quotation from Mr. Nilsson's work. That gentleman's authority was the Öfwer Director of Uhr; and the birds alluded to were at a forge in the province of Dalecarlia. "They were kept together during the winter in a large loft over a barn, and were fed with corn, and got occasionally a change of fresh spruce, fir, pine, and juniper sprigs. Early in the spring they were let out into an enclosure near the house, protected by a high and close fence, in which were several firs and pines, the common trees of the place. In this enclosure they were never disturbed; and during the season of incubation no one approached, except the person who laid in the food, which at that time

consisted of barley, besides fresh sprigs of the kinds beforementioned. It is an indispensable rule that they shall have full liberty, and remain entirely undisturbed, if the hens are to sit and hatch their young. As soon as this had occurred, and the brood were out, they were removed to the yard, which was also roomy, and so closely fenced that the young ones could not escape through; and within this fence were hedges, and a number of bushes planted. Of the old ones, one of the wings was always clipped to prevent their flying. I have seen several times such broods, both of black game and capercali, eight to twelve young ones belonging to each hen. They were so tame that, like our common hens, they would run forward when corn was thrown to them. They should always have a good supply of sand and fresh water."

According to Mr. Nilsson, "when reared from the time of being a chicken, he frequently becomes as tame as a domestic fowl, and may be safely left at large. He, however, seldom loses his natural boldness, and like the turkey-cock, will often fly at and peck people. He never becomes so tame and familiar as the black-cock. Even in his wild state, the capercali occasionally forgets his inherent shyness, and will attack people when approaching his place of resort. Mr. Adlerberg mentions such an occurrence. During a number of years an old capercali-cock had been in the habit of frequenting the estate of Villinge at Wermdö, who, as often as he heard the voice of people in the adjoining wood, had the boldness to station himself on the ground, and during a continual flapping of his wings, pecked at the legs and feet of those that disturbed his domain. Mr. Brehm also mentions a capercali-cock that frequented a wood a mile distant from Renthendorf, in which was a path or roadway. This bird, as soon as it perceived any person approach, would fly towards him, peck at his legs, and rap him with its wings, and was with difficulty driven away. A huntsman succeeded in taking this bird, and carried it to a place two miles (about fourteen English) distant; but on the following day the capercali resumed its usual haunt. Another person afterwards caught him, with a view of carrying him to the Öfwer-Jägmästare. At first the bird

remained quiet, but he soon began to tear and peck at the man so effectually, that the latter was compelled to restore him to his liberty. However, after the lapse of a few months, he totally disappeared, probably having fallen into the hands of a less timid bird-catcher."

At the period of the year of which I am now speaking, I usually shot the capercali in company with my Lapland dog, Brunette. She commonly flushed them from the ground, where, for the purpose of feeding upon berries, they are much during the autumnal months. In this case, if they saw only the dog, their flight in general was short, and they soon perched in the trees. Here, as Brunette had the eye of an eagle and the foot of an antelope, she was not long in following them. Sometimes, however, those birds were in the pines in the first instance, but as my dog was possessed of an extraordinarily fine sense of smelling, she would often wind, or, in other words, scent them from a very long distance. When she found the game she would station herself under the tree where it was sitting, and, by keeping up an incessant barking, direct my steps towards the spot. I now advanced with silence and caution, and as it frequently happened that the attention of the bird was much taken up with observing the dog, I was enabled to approach until it was within the range of my rifle, or even of my common gun.

Mr. Greiff, in speaking of dogs proper for capercali-shooting, says, "They ought to be rather small, not to bark violently, but only now and then; to hunt only at a short distance from the sportsman; to have a good and sure scent, and to be easily called in." That gentleman observes farther: "When the frosty nights commence, the capercali sits better to the cocker than at other times."

In the forest, this noble bird does not always present an easy mark when he takes wing from the trees, for, dipping down from the pines nearly to the ground, as is frequently the case, they are often almost out of distance before one can properly take aim. No. 1 or 2 shot may answer very well at short range to kill the hens, but for the cocks the sportsman should be provided with much larger. The above plan is very commonly adopted throughout Scandinavia, and, during the

autumnal months in particular, is occasionally attended with considerable success. But I do not speak from much experience, as, at that period of the year, my time has, in general, been otherwise occupied. I have, however, killed five of those birds in a single day. In the early part of the autumn cocks and hens sit nearly equally well to a dog, but as the season advances, the cocks become so excessively wild as usually to take flight the instant the dog begins to challenge. This is not always the case with the hens, for these will often remain in the trees, during all periods of the year, until a person approaches immediately near to them.

Towards the commencement, and during the continuance of the winter, the capercali are generally in packs; these, which are usually composed wholly of cocks (the hens keeping apart), do not separate until the approach of spring. These packs, which are sometimes said to contain fifty or a hundred birds, usually hold to the sides of the numerous lakes and morasses with which the Northern forests abound; and to follow the same in the winter time with a good rifle is no ignoble amusement. But enough of this for the present, as hereafter I shall have occasion to revert to the subject. I never had much opportunity of using pointers when in search of the bird in question, though, if these were steady, and under good command, I should think they would answer the purpose exceedingly well in the early part of the season; perhaps, however, I should give the preference to such dogs as the one of which I have just spoken, for, in the event of the capercali being in the trees in the first instance, or that he has been flushed, in which case, unless wounded, he always takes into them, pointers would be nearly useless.

Among other expedients resorted to in the Northern forests for the capture of the capercali, is the following: During the autumnal months, after flushing and dispersing the brood, people place themselves in ambush, and imitate the cry of the old or young birds as circumstances may require. By thus attracting them to the spot they are often enabled to shoot the whole brood in succession. The manner in which this is practised may be better understood from what Mr. Greiff says on the subject. "After the brood has been dispersed, and you

see the growth they have acquired, the dogs are to be bound up, and a hut formed precisely on the spot from whence they were driven, in which you place yourself to call, and you adapt your call according to the greater or less size of the young birds. When they are as large as the hen, you ought not to begin to call until an hour after they have been flushed; should you wish to take them alive, a net is placed round him who calls. Towards the quarter the hen flies there are seldom to be found any of the young birds, for she tries by her cackling to draw the dogs after her, and from her young ones. So long as you wish to continue your sport you must not go out of your hut to collect the birds you have shot. When the hen answers her call, or lows like a cow, she has either got a young one with her, or the calling is incorrect, or else she has been frightened, and will not then quit her place. A young hen answers more readily to the call than an old one."

In speaking of the various devices adopted in Scandinavia for the capture of the capercali and other wild fowl, Mr. Greiff makes the following observations:- "Most of the forest birds are caught in the autumn by birdlime or the usual snares, and also by nets. In all these methods it is necessary to lead the bird by low rows of brushwood into small pathways. With snares of fine brass wire, suspended over these, he is easily caught. One of my own methods, by which I have amused myself, and taken many birds alive, is by a simple knotted square silk net, of thirty inches width in the square, and the meshes so large that the capercali can easily put his head through. This is to be hung over the pathway, and fastened slightly to small branches, by weak woollen yarn, just sufficient to support the net in a square form, with some small twigs and leaves of the fir spread over it. Round the net a silk line is passed through the extreme meshes, and fastened to a stout When the capercali has got his head into a mesh of the net, and finds that something opposes him, he always runs directly forward, when the silk line is drawn close, and the bird lies as if in a reticule, with his wings pressed to his body unable to move himself, or to tear the net, however weak it may be, although it always should be made of twisted silk.

In autumn, when the cranberry is plentiful in the forest, by strewing these berries on each side of the net, you entice the birds to advance eagerly. This sport produces much amusement. Of the supply this bird furnishes to the larder, and the delicious dish it forms when brought to table, everyone knows the value." In a note Mr. Greiff adds: "One night when a sufficiency of snow fell to enable me to trace them, three wolves passed within ten paces of a capercali, who had been caught in the net the night before, still the wolves never injured the bird."

In other instances the capercali is shot in the night-time by This plan, which is said to be very destructive is, I believe, confined to the southern provinces of Sweden, for in the more northern parts of that country I never heard of its being adopted. In Smaland and Ostergöthland, this is said to be effected in the following manner: Toward night-fall, people watch the last flight of the capercali before they go to roost. The direction they have taken into the forest is then carefully marked by means of a prostrate tree, or by one which is felled especially for the purpose. After dark two men start in pursuit of the birds; one of them is provided with a gun, the other with a long pole, to either end of which a flambeau is The man with the flambeau now goes in advance, the other remaining at the prostrate tree to keep it, and the two lights in an exact line with each other. By this curious contrivance they cannot well go astray in the forest. Thus they proceed, occasionally halting, and taking a fresh mark, until they come near to the spot where they may have reason to suppose the birds are roosting. They now carefully examine the trees, and when they discover the objects of their pursuit, which are said stupidly to remain gazing at the fire blazing beneath, they shoot them at their leisure. Should there be several capercali in the same tree, however, it is always necessary to shoot those in the lower branches in the first instance, for unless one of these birds falls on its companions, it is said the rest will never move, and in consequence the whole of them may be readily killed.

But the greatest destruction that takes place among the capercali in the Northern forests is, as I have more than once

said, during the time of incubation, in the spring of the year. At this period, and often when the ground is still deeply covered with snow, the cock stations himself on a pine, and commences his love-song, or play, as it is termed in Sweden, to attract the hens about him. This is usually from the first dawn of day to sunrise, or from a little after sunset until it is quite dark. The time, however, more or less, depends upon the mildness of the weather, and the advanced state of the season.

During his play, the neck is stretched out, his tail is raised and spread like a fan, his wings droop, his feathers are ruffled up, and, in short, he much resembles in appearance an angry turkey-cock. He begins his play with a call something resembling Peller, peller, peller. These sounds he repeats at first at some little intervals; but as he proceeds they increase in rapidity, until at last, and after perhaps the lapse of a minute or so, he makes a sort of gulp in his throat, and finishes with sucking in, as it were, his breath. During the continuance of this latter process, which only lasts a few seconds, the head of the capercali is thrown up, his eyes are partially closed, and his whole appearance would denote that he is worked up into an agony of passion. At this time his faculties are much absorbed, and it is not difficult to approach him. Many indeed—and among the rest Mr. Nilsson—assert that the capercali can then neither see nor hear, and that he is not aware of the report or flash of a gun, even if fired immediately near to him. To this assertion I cannot agree, for though it is true that if the capercali has not been much disturbed previously, he is not easily frightened during the last note, if so it may be termed, of his play. Should the contrary be the case, he is constantly on the watch, and I have reason to know that even at that time, if noise be made, or that a person exposes himself incautiously, he takes alarm and immediately flies.

## CHAPTER XXX.

The Capercali still—The effect of its Love-song—The old Birds don't allow the young ones to play—Stalking the Capercali during its Song—Accidents sometimes occur—Mistaken ideas about the Capercali—Capercali Shooting in the Winter-time fine diversion—Much depends on the state of the Snow—Thick and misty Weather best—Requires great management—Pursuing a pack for a fortnight.

THE play of the capercali is not loud; and should there be wind stirring in the trees at the time, it cannot be heard at any considerable distance. Indeed, during the calmest and most favourable weather, it is not audible at more than two or three hundred paces. On hearing the call of the cock, the hens, whose cry in some degree resembles the croak of the raven, or rather, perhaps, the sounds Gock-gock, gock, assemble from all parts of the surrounding forest. The male bird now descends from the eminence on which he was perched to the ground, where he and his female friends join company. He does not play indiscriminately over the forest, but he has his certain stations (Tjader-lek, which may, perhaps, be rendered his playing-grounds). These, however, are often of some little extent. Here, unless very much persecuted, the song of these birds may be heard in the spring for years together. The capercali does not during his play confine himself to any particular tree, as Mr. Nilsson asserts to be the case; for, on the contrary, it is seldom he is to be met with exactly on the same spot for two days in succession. On these lek, several birds may occasionally be heard at the same time. Mr. Greiff, in his quaint way, observes, "It then goes gloriously." But so long as the old male birds are alive, they will not, it is said, permit the young ones, or those of the preceding season, to play. Should the old birds, however, be killed, the young ones, in the course of a day or two, usually open their pipes. Combats, as it may be supposed, not unfrequently take place on these occasions; though I do not recollect having heard of more than two of those birds being engaged at the same time.

Though altogether contrary to law, it is now that the greatest slaughter is committed among the capercali; for any lump of a fellow who has strength to draw a trigger, may, with a little instruction, manage to knock them down. But as the plan of shooting these noble birds during their play is something curious, I shall do my best to describe it. It being first ascertained where the lek is situated, which is commonly known to the peasants and others in the vicinity, the sportsman (if so he may be called) proceeds to the spot, and listens in profound silence until he hears the call of the cock. So long, however, as the bird only repeats his commencing sound, he must, if he be at all near to him, remain stationary; but the instant the capercali comes to the wind-up, the gulp, during which, as I have said, his faculties of both seeing and hearing are in a degree absorbed, then he may advance a little. But this note lasts so short a time, that the sportsman is seldom able to take more than three or four steps before it' ceases; for, the instant that is the case, he must again halt, and if in an exposed situation, remain fixed like a statue. This is absolutely necessary; for, during his play, excepting when making the gulp, the capercali is exceedingly watchful, and easily takes the alarm. If all remain quiet, the bird usually goes on again immediately with his first strain; and when he once more comes to the final note, the sportsman advances as before, and so on, until he gets within range of shot.

To become a proficient at this sport, requires a good deal of practice. In the first place, a person must know how to take advantage of the ground when advancing upon the capercali; for, if full daylight, this is hardly practicable (whatever may be said to the contrary) in exposed situations; and in the next, that he may not move forward, excepting upon the note which is so fatal to that bird. This is likely enough to happen, if it be an old cock that has been previously exposed to shots, for he often runs on, as I have repeatedly heard him, with Peller, peller, peller, until one supposes he is just coming to the gulp, when he suddenly makes a full stop. If, therefore, a person was then incautiously to advance, he would in all probability instantly take to flight. At the lek, the cocks most commonly

fall the sacrifice; for the hens, as well from their colour more resembling the foliage of the trees, as from the sportsmen having larger and better game in view, usually escape. This is a fortunate circumstance, as were a proportionate slaughter to take place among the latter as the former, the breed in many parts of the Scandinavian peninsula would soon be exterminated. In following this amusement, accidents have occurred. In the gloom of the morning or evening, it has happened that, whilst a person has been stealing silently forward among the trees, he has been taken by others engaged in the same pursuit for a wild beast, and in consequence a ball has been sent whistling after him. I heard of one man who in this manner was shot through the body.

The number of capercali a man may shoot in a given period by the above means depends altogether upon circumstances. Indeed, it often happens that in countries abounding with those birds, from the state of the weather, there being a crust upon the snow, the most experienced chasseurs will hardly kill a single one for days together. I have, however, heard people assert they have bagged as many as six or seven in the course of the morning and evening of the same day; but one or two is a much more usual number. A peasant in the interior, who devotes a good deal of time to the purpose, will, if he understand what he is about, commonly kill from fifteen to twenty; and in one instance, I remember hearing of twenty-nine in the course of the season. This, in a country where every one carries a gun, will give an idea of the havoc that is made among the capercali, and readily explains their present (as I contend) scarcity.

Though this plan during the spring is common throughout most parts of Scandinavia, I am told, that in Norrland and Wästerbotten, from whence Stockholm is furnished with its principal supplies of game, that destructive practice is not generally adopted. This arises from the people in those districts having sense enough to know, that if they kill too many of the cocks in the spring, there is little probability of their being a good breed during the succeeding autumn.

The capercali occasionally strikes up a few notes, in the manner of which I have already spoken, during the autumnal

months—about Michaelmas, I believe. For this, it is perhaps difficult to assign a reason. Mr. Greiff suggests "that it may be to show the young birds where the *lek* is situated." I have never myself heard the capercali playing at this period of the year; but I have met with men, on whose word I am inclined to place confidence, who have repeatedly killed them at that time whilst so occupied.

Though so many of those magnificent birds are destroyed by the unsportsmanlike means which I have just described, it rarely happens that more than one of them is killed at a shot; indeed, I never heard of but a solitary instance where as many as three were destroyed at a single discharge. This, I am aware, is a little at variance with the statement of other Scandinavian travellers:—one among them says, "in that season (in the spring), the peasant, at an early hour of the morning, sallies forth into the forest, armed with his fowlingpiece, and listens attentively for the voice of the cock, which, perched on a lofty pine, brings the hens together from all parts; the other cocks likewise repair to the spot, and, instigated by love and jealousy, a furious battle commences, during which they are so deeply engaged, and so inattentive to their own safety, that the gunner will frequently kill no less than a dozen of these large birds at a shot." Of course it is not for me to contradict this statement, though, independently of its not being usual for the capercali to engage in such battlesroyal as are here described, it would seem to require a gun of no ordinary calibre to slaughter at a single discharge a dozen birds, each of which is pretty nearly as large as a turkeycock. The traveller to whom I have just alluded, in speaking of the capercali, in another part of his work, says, "The difficulty of finding their eggs is so great that the peasants even seem to consider it in a manner proverbial; and I never met with one of them who had either seen the same or discovered a nest." This may be the case, for all I know to the contrary, in other parts of Scandinavia; but in Wermeland and the adjacent provinces, at all events, it was no unusual occurrence for people to fall in with both one and the other. The same author, in describing the play of the bird, has, I apprehend, committed a mistake; for he says: "His note, though

extremely varied during the breeding season, consists principally of an extremely loud hissing kind of cooing, which may be heard for a considerable distance around." Now, this description, which would not inaptly apply to the black-cock, is certainly as opposite as light is from darkness to the play of the capercali.

With a really good rifle, capercali shooting in the winter time is, indeed, a fine diversion. At that season, as I have said, the male birds usually pack, and are often to be met with in considerable numbers in the vicinity of the numerous lakes and morasses with which the Scandinavian forests abound. But the great difficulty is to find them in the first instance, for one may occasionally wander a day or two in the wilds of the forest without meeting with a pack, or even a single bird. If a pack be once found, however, the sportsman may generally manage to follow it for a whole day, or, perhaps, for a week together.

The larger the pack the better, for, in that case, the birds are easier to be seen when sitting on the pines. It seldom happens, besides, that the whole of the birds fly at once, in which case a person has usually an opportunity of observing the direction which is taken by one or other of them; if, on the contrary, the pack be small, the sportsman cannot so well discover the birds in the first instance, and, in addition to this, if they all happen to take wing at the same time, when he has not his eye upon them, he not unfrequently loses them altogether. This I have repeatedly known to happen.

One's sport when stalking, or rather stealing, on capercali, mainly depends on the state of the snow. If this is loose and soft under foot, and there be much of it hanging on the trees, one may usually manage to get within good rifle range of these birds, but if, on the contrary, there should be a crust on the snow, which, after rain or partial thaws, followed up by a frost, is always the case, and little of snow in the trees, then it is far from an easy matter to approach them. At such times, from their view being less obstructed, and from hearing the crackling of the snow caused by the step of a person, they are usually exceedingly wild, and, in consequence, it is only a bird now and then that one can come in upon.

Thick and misty weather (and if it snows a little it is all the better) is the most favourable for this sport, for the capercali then sit on pines, with their feathers muffled out like so many turkeys, and, even when disturbed, their flight is usually but for a short distance. If, on the contrary, the weather should be boisterous or excessively cold, the capercali, as I have recently remarked, are frequently on the ground, or so shrouded in the body of the trees, that they are not readily perceptible. If the weather, besides, be tempestuous, the capercali, when they take wing, often fly for a long continuance. When the weather is cold, and the snow loose and soft, the capercali not unfrequently buries himself beneath its surface during the night season. Once in a while, also, I have found him in that situation in the daytime.

It requires great management to approach a pack of capercali, as from those birds usually frequenting the more open parts of the forest, sufficient cover is not always to be found to enable the sportsman to steal upon them. It is particularly difficult to get within range of a large pack, as, let a person take what direction he will, the eye of one or other of the birds, from their being scattered among all the surrounding pines, is sure to be upon him. In following this sport a person should be provided with a rifle that shoots accurately at something better than a hundred paces, for it is rarely one can get within a shorter distance of these birds. If one be at all near to the capercali when one fires, and should miss him, he almost always flies, but if, on the contrary, one is at a hundred and fifty or a hundred and eighty paces distance from the bird, he will often sit until one has emptied a powder-horn. From having a very bad rifle, I have more than once fired eight or ten shots in succession at a capercali without his altering his position in the least. Indeed, the birds only took wing at last when my balls scraped a few feathers from their bodies.

The pursuit of the capercali is a favourite amusement of the northern chasseurs during the winter season. Though their rifles most commonly carry a ball no larger than a pea, these men often make extraordinary fine shots. It is an interesting sight for a bystander to see in the distance a capercali brought down; one moment that noble bird is seen sitting on the pinnacle of a pine, and in the next, before one hears the report of the gun, he is tumbling headlong to the ground.

Jan Finne, at an earlier period of his life, was in the habit of shooting great numbers of capercali. He once pursued the same pack for a fortnight. This consisted originally of twenty-six birds, but by the expiration of that time only one was left alive. Six was the greatest number of capercali he ever killed in any one day.

Though I myself never saw more than fourteen or fifteen of those birds together during the winter season, they occasionally congregate in very considerable numbers. Indeed, a peasant near to Hjerpeliden, a Finnish hamlet situated on the Norwegian frontiers, assured me that, in his younger days, he had once known a pack to consist of upwards of two hundred. A comrade and himself went often in chase of these birds, but though, in the course of the winter, they killed about forty of them, the pack did not seem to be materially diminished. But this was the less to be wondered at, as, from the vast track of country the birds were driven over in that while, their numbers must necessarily have been occasionally added to by the junction of other small packs, or even straggling birds.

## CHAPTER XXXI.

The Eagle in Scandinavia—Its Breeding Habits—The Poor occasionally derive benefit from—Its Ferocity—Capturing an Eagle Alive—An Eagle attacking a Man—Manner of Killing its Prey—The Eagle Domesticated—Sometimes Overmatched in Capturing Prey—The Eagle and the Pike—Catching Eagles in a Trap—Shooting Eagles in Scandinavia.

THE Golden Eagle, though occasionally seen in the vicinity of Ronnum, was scarce. In the summer season this bird confines

himself principally to the more northern parts of Scandinavia; but during the autumn and winter he is pretty common in the south of Sweden. Varieties have now and then been met with in the peninsula. We are told of one killed in Scania some years ago that was perfectly white; and of another that was so in a great degree. A large portion migrate.

Though the golden eagle for the most part breeds in the face of a precipitous rock, he at times has his eyrie on the top of a lofty pine, or other tree. The nest, which is not built for a single year, but for life-time, is nearly six feet in diameter. It is flat, and without any visible depression in the centre and is formed of sticks, heather, and reeds. The female lays two, and occasionally three eggs, of a dirty-white colour, marked with red-brown spots, and sits a month.

Poor people in parts of Scandinavia occasionally derive considerable benefit during the breeding season from having the eagle for a neighbour; for watching the departure of the parents from the eyrie, they plunder it of the game which have been provided for the young. And when, moreover, these become nearly fledged, they tie their legs to the nest, that the supply to the larder may last the longer. curious notions were formerly entertained respecting the eagle. Amongst the rest, that when hares failed him, he would attack not only deer, but horses-more especially such as were old and worn out. "In this enterprise," says Pontopiddan, "he makes use of this stratagem: he soaks his wings in water, and then covers them with sand and gravel, with which he flies against the animal's face, and blinds him for a time; the pain of this sets him running about like a distracted creature, and frequently he tumbles down a rock, or some steep place, and breaks his neck; thus he becomes a prey to the eagle."

Many stories are related in Scandinavia regarding the ferocity of the eagle, and of his carrying away children. The author quoted tells us that an instance of the kind occurred in 1737, in the parish of Norderhoug in Ringerige. A boy, aged two years, was in a state of nudity, playing on the ground not far from his parents, who were occupied with agricultural labours, when in an instant one of these birds pounced down upon the infant, and before assistance could be rendered, bore

it away to his eyrie. Only the autumn before the last, indeed, a little girl, five years old, but of diminutive stature for her years, met with the like fate at Lexviksstrand in Norway. The child had been left alone a short time by the mother, in a field near to the house, when a Jätte-örn—that is, a gigantic eagle—carried her off; and though search was made everywhere, it was not until several weeks afterwards that the remains of the poor creature were found high up on the fjälls. In the near vicinity of the spot where this catastrophe happened, and about the same time, this very eagle, as it was believed, made a stoop at a little boy near to the strand of a lake; but the father, who was in a boat close to the shore, by forcibly striking the oars on the gunwale, was fortunate enough to scare away the bird.

In the province of Scania the royal bird was, on one occasion, circumvented in a very singular manner. "A peasant having observed an eagle soaring near to his homestead in search of prey," so runs the story, "and having no gun at hand determined, nevertheless, on attempting his capture. For this purpose he threw a sheep-skin, the woolly side outwards, over his shoulders, and thus equipped, crawled on all fours about the spot haunted by the bird; and his wile had the desired effect, for no sooner did the eagle perceive him, than imagining him a veritable sheep, down he pounced upon his back. Being quite prepared for the onset, the man at once embraced the eagle's outstretched wings with his arms, and thus in triumph bore him home, where a by-stander quickly knocked the enemy on the head. But the poor fellow suffered severely for his ingenious, though adventurous ruse, for in his death-struggles the eagle not only drove his talons through the sheep-skin, but deep into the man's flesh, from whence, when life was extinct in the bird, it was found impossible to extract them without having recourse to the knife." A somewhat similar story to the foregoing was told me by Dr. Willman. "During the autumn of 1846," said that gentleman, "whilst residing with Mr. P. O. Andersson, at Kjeflinge-Mölla, in Scania, the innkeeper of that village, Holmberg, purchased an eagle of a peasant who was on his way to the town of Lund, where he had purposed taking him for sale. On questioning

the man as to the way in which he became possessed of the bird, he stated that during the preceding day, which was cold and misty, and whilst occupied in hewing timber in the forest, he was all at once assailed on the back and shoulders by an unseen enemy; that on turning his head about he found it to be the eagle in question which, without injuring him, had driven its sharp talons through and through his thick sheep-skin coat! Seizing hold of a stick, he forthwith commenced belabouring the bird about the head, and continued to do so until such time as life appeared extinct, when, withdrawing the claws from his clothes, he walked off with his prize towards home. On his way, however, the bird began to revive, and by the time he reached the house had quite come to itself again.

"Subsequently." Dr. Willman went on to say, "Holmberg caused a capacious cage to be constructed for the accommodation of this eagle. One day it happened that a son of his went up to the cage, and by gestures, and otherwise, so irritated the bird, that with the rapidity of lightning he struck one of his talons between the bars into the tormentor's hand, and with such force, that the middlemost claw not only passed clean through the hand, but a quarter of an inch of it or more protruded on the other side! Happily, however, a servantman, hearing the cries of the boy, who was almost beside himself with pain and fright, hasted to the rescue, and soon succeeded in freeing him from his ferocious assailant. After this catastrophe, Holmberg, who had several smaller children, fearing to retain the eagle longer on the premises, gave him to Mr. P. O. Andersson, of Kjeflinge-Mölla, where I had ample opportunity of studying his habits. Here we fed him partly on the entrails of calves and other animals, slaughtered for the use of the family, and partly with pigs that had died from . natural causes; as also on rats, crows, and magpies, which I shot for the purpose. One day the entrails of a calf were given to the eagle. After the bird had satisfied his hunger, I went up to the cage, which was very roomy, and observed that he sat on the uppermost perch; and that a full-grown cat, which had passed between the bars, was eating with great appetite of the refuse of the offal. I remained passive, to see

how the matter would end. The eagle, with his head inclined downwards, seemed narrowly to watch the movements of the intruder. But when the cat had finished her meal, and was about to move off-one-half of her body being indeed already outside the bars of the prison—the royal bird, with incredible quickness, struck one of his talons into her side, and drew her back into the cage again. The cat made a most desperate resistance, and attempted to bite her assailant's leg, on which the eagle seized her by the head with the other talon, in such manner that a claw penetrated each eye, and forced both out of their sockets; and in this posture the bird remained until poor Grimalkin was dead. But as all this took place near to the side of the cage, and as the eagle-probably from fear of interruption—would never touch anything unless he was in the centre of the cage, he therefore withdrew the talon inserted in the cat's head, and, with the other still deeply embedded in the body of his victim, walked or rather stumped away with the cat to his accustomed feeding-place. His first act was to draw out the tongue, which he immediately devoured. Afterwards he made an aperture with his beak below the breast-bone, and eat part of the lungs; but the remainder of the cat was left until the following day, when he finished it. Several times, when the eagle was supplied with a dead cat, I made the remark that, provided the jaws of of the cat were not immovably fixed, he, in the first instance. always devoured the tongue. A dead pig was his favourite food. He was also contented with rats; and when very hungry, would not tear them in pieces, but swallow them whole. This I saw him do with nearly full-grown individuals of Mus decumanus. Once he escaped out of the cage, and whilst being recaptured received much maltreatment, from which he seemed never fully to recover; and one morning towards the spring he was found dead in his prison."

The Cinereous, or White-tailed Eagle, though not common, was occasionally met with in my neighbourhood, as also on the coast, where indeed to my knowledge some bred. As with the golden eagle, he is most abundant in the more northern parts of Scandinavia—M. von. Wright met with him as high up as 70° 31′ of latitude—and excepting in the autumn and

winter, is not so frequently seen in the southern provinces of Sweden.

Though the cinereous, like the golden eagle, has his eyrie for the most part on the shelf of a steep and lofty rock, he also makes his nest in a tree, and frequently at some distance from water. The female lays from two to three eggs, white in colour. In disposition, this bird is less ferocious than the golden eagle; and if taken when very young is easily domesticated, in which case he is said to evince more cowardice than courage. Instances are on record of his being allowed to go at large with the fowls in the poultry-yard, and of his never injuring them in any way. On the contrary, he rather served to protect them; for his mere presence naturally scared away the smaller birds of prey, which might otherwise have been inclined to molest them. On one occasion I myself reared a pair of cinereous eagles, which were taken from an eyrie near Uddevalla; but as I never gave them entire freedom, I had not much opportunity of studying their habits and dispositions.

If what M. Holmstedt tells us of the one in his possession be applicable to the breed generally, it would seem as if this bird soon becomes attached, as well to his home as to his "The cinereous eagle, which I have now had for nearly three years," writes that gentleman, "is very tame and beautiful. He allows himself to be caressed with the hand, and will come to one when called; and is, in short, very amusing. For this reason he has his full liberty, and is constantly at large in the open air, and flies wherever he pleases. He often visits his wild brethren on the shores of Lake Wenern, but always returns home again, when he is treated to something or other. Fish is his favourite food; and if he obtain a sufficiency of the finny tribe at home, he remains with us for several days together, but if the reverse be the case, he caters That my eagle may be recognised, for himself elsewhere. I have, by means of an iron chain, fastened a metal bell around his neck, which, as he flies, rings constantly and loudly. This unusual noise, when, in majestic circles, he traverses the air, always causes a multitude of gulls and terns to congregate about him; and it is their cries, and the sound of the bell, that announce his return from distant friends. During his excursions, he often visits the fishermen amongst the islands, to whom he is well known, and by whom he is always treated to some dainty or other. Once he so far forgot himself as to attack some poultry on the property of Nynäs, which crime proved nearly fatal to him; but with that exception he has never done any harm, and his manifold adventures render him highly interesting."

The cinereous eagle preys not only upon fish, and the larger kind of water-fowl—such as ducks, geese, cranes, herons.—but on young seals, if found basking on a rock, or swimming near to the surface of the water. At times, however, he makes the very grievous mistake of striking his crooked talons into the back of an old seal, which usually costs him his life; for so soon as the seal finds himself thus assaulted, he forthwith dives to the bottom, and the eagle being unable to extricate his claws is, as a consequence, obliged to follow. The same fate also at times awaits the eagle, if he fixes his talons into an overgrown turbot or halibut; for though, as Pontoppidan says, "he may resist for a while, he must yield at last, and become a prey to those he intended to devour. This," the worthy prelate goes on to remark, "may serve as an emblem to many stupid and inconsiderate enterprises."

The eagle, moreover, when pouncing on fish or animals of superior power to himself, is occasionally doomed in other ways than by drowning. "I have been told by several creditable people from their own knowledge," says the same author, when speaking of the seal carrying the eagle under water, "of another unfortunate expedition of the eagle, which shows that this mighty king of birds is often in the wrong, and extends his attempts beyond his power among the fish. An incident of this kind happened not far from Bergen, where an eagle stood on the bank of a river, and saw a salmon, as it were, just under him; he struck instantly one of his talons into the root of an elm close by, and partly hanging over the river; the other he struck into the salmon, which was very large, and in his proper element, which doubled his strength,

so that he swam away, and split the eagle to his neck, making literally a spread eagle of him—a creature otherwise known only in heraldry."

A somewhat similar circumstance to the above was related to me by Magnus, the fisherman at Trollhättan, when I was at that hamlet during the past summer. "About the year 1787," said he, "when an uncle and aunt of mine, together with several other persons, were waiting for the parson at the outside of Naglum Church (situated at only two or three miles from Ronnum), and immediately near to the river Gotha, they saw an eagle pounce upon an immense pike, basking close to the bank. One of his talons the bird struck into the fish; but with the other, and for the purpose of securing his prey it is to be presumed, he clutched firm hold of an alder-bush, growing hard by. But this manœuvre cost the bird dear; for the pike, in retreating, made so desperate a plunge downwards, as literally to tear the thigh from the body of his assailant! The severed limb was found attached to the bush in question; but of the eagle himself, which was carried bodily under water by the pike, nothing more was ever afterwards seen or heard."

Again—" My father, the late A. Willman, Stads-Medicus, or town doctor, in Malmö, who received the first rudiments of his education in the country," such were the words of Dr. Willman, "related to me that in his boyhood it happened one day in the vicinity of where he dwelt, that an eagle pounced down upon and fixed his talons in the back of a heifer, which in her fright rushed with all speed towards the Ladu-gård, or cattle-house. On the way home the animal passed a gatepost, of which the eagle thought to take advantage; for whilst retaining hold of his prey with the one talon, he firmly grasped the post with the other, no doubt with the intention of 'bringing up' the runaway. But in this matter the bird somewhat miscalculated his powers; for instead of thereby staying the headlong career of the heifer, her impetus was such, that the lord of the air was himself actually riven in twain."

Several plans are adopted in Scandinavia to destroy eagles; but the common steel-trap is perhaps the device most resorted to. "In the spring—in the month of March," says M. von

Wright, when speaking on this subject, "I placed upon the ice, at about two miles from where I resided, a dead and flaved calf. After it had lain there about two days, I observed, by the marks of claws, that an eagle had preyed upon it. this I took a common hare-trap, and after baiting it with a piece of meat, of about the size of my fist, I deposited the trap on the snow, near to the carcase; but in such manner that only a very small part of the bait was visible. Already on the following day an eagle, still living, sat with both legs in the trap, exactly in the same way as a misdoer in the stocks. Whilst yet at a distance, I observed that the bird held down his head, as if he would hide himself; but when I had approached immediately near to him, he reared himself up, and giving me several piercing glances, made an attempt to fly, in which effort, nevertheless, although the trap was of no great weight, he was unsuccessful. This eagle weighed eight pounds. The next day I captured another, which was fast by only one leg, that weighed nine pounds and a half. The maws of both were filled with several pounds of meat, whence it is clear they had first fed on the carrion, and it was not until they were about to depart, that they had seized the bait. At this same spot I caught, in five days, four eagles, all of the same species (Aquila Chrysaëtos, Vig.), but varying in size; the last was the largest and heaviest, and weighed fully thirteen pounds."

In Scania (and it may be elsewhere in Scandinavia) eagles are shot from a Skott-koja, or shooting-hut, erected for that Though the method may not be new, it is, I special purpose. believe, unpractised in England, and a short description may therefore be in place. It should be remarked, however, that the plan is only adopted in the winter time, as well for the reason that dire hunger alone allures the eagle to carrion, as that but few of those birds are seen in the southern parts of "The spot selected for the purpose," Sweden in the summer. the Count Chr. W. Dücker informs us, "ought to be in an open part of the country; for when no obstacle intervenes to prevent his sure and sharp eyes from descrying his enemy, the eagle is the more daring. And should there be a large wood, and a lake in the vicinity, it is all the better; for that

bird from choice seeks the strand, and in preference selects for his resting-place some ancient and sturdy tree that is unbending during storms.

"A hole of some six feet in depth, by fourteen in diameter, is dug during dry weather, and a small, low hut erected in the cavity. The roof should rise but little above the ground, and be covered with turf, and the like, it being of the utmost consequence that it have as natural an appearance as possible; for if the eagle has the least suspicion, he will not be easily induced to approach the spot. All the interstices between the stones, or boards, of which the hut is constructed, should be filled with moss, to keep out the cold and wind; and if needed, a fire-place, together with a chimney, may be added; for provided the eagle sees nothing, he is exceedingly fearless. Loop-holes, of some six to eight inches in diameter, at a few inches above the level of the ground, should be made in various places in the upper part of the hut; the entrance to which should be situated on the contrary side to that on which the carrion is placed. A withered tree, with a few branches attached, should, by rights, be set up within easy range of the hut, as it not unfrequently happens that the eagle, before pouncing on his prey, will settle upon it. In case of such a tree being provided, an aperture must be made in the roof. that, let the bird perch on which branch he may, the shot will be sure to reach the mark.

"Towards the end of October, or beginning of November, a dead horse, cow, or other animal of some size, must be placed within gun-shot of the hut; but until such time as the first snow falls, the carcase must be protected by Granris, to prevent wolves and foxes from devouring it. So soon as snow falls, however, the covering must be removed, and constant watch be kept. One should take post in the hut before sun-rise—the appetite of the eagle being then always the keenest. Soon after noon he also visits the carrion; and if he has been seen there at that time, one may be quite certain of shooting him on the following morning.

"When an eagle is killed, one ought to allow him to remain undisturbed where he fell, for it not unfrequently happens that there may be three or four more of these birds in the immediate vicinity of the hut; and if they have once discovered the lurking enemy, they will know how to avoid him. An eager, and, as regards this species of amusement, inexperienced sportsman may get into a very awkward scrape if he should have wounded an eagle, and approached him without being well armed; for such a bird is not to be trifled with. He has indomitable courage, and extraordinary strength; and it is, therefore, safest to go up to him with a strong and tolerably long stake, so that when at a respectful distance, one may give him the coup de grace.

"One morning I was sitting in a hut of the kind described, which had been erected by my companion—an old sportsman-who, though worn out with age and infirmities, could not forego his favourite pursuit. We had not waited long before we discovered a large and magnificent eagle perched on the top of a lofty tree in the neighbouring forest. Here for a time he remained motionless, and as if undetermined what course to take. But presently he left his perch, and with distended wings, and gradually lowering himself, he soared through the air towards us—the ravens, and other birds that had collected about the spot, retreating, with screams, at his approach—and at length alighted very near to the Luderplats. He now paused for a few seconds, casting his flashing eyes around on every side to ascertain that all was safe, and then pounced fiercely on to the carrion. I was now about to fire, but the old gentleman, my companion, who was deaf as a post, cried out, 'No, no! let us look at him for a time.' I was in despair at hearing this exclamation, fancying that the eagle would take wing, and that we should never see him more; but to my great astonishment he remained perfectly passive, and continued his repast. Subsequently, I put many questions in a loud voice to my ancient friend, and long contemplated and admired the winged hero, which, however, at length fell to my gun.

"Some of my friends were, in another instance, sitting in the same hut, when, as luck would have it, no fewer than three eagles simultaneously paid the carcase a visit, all of which—on the aforesaid old sportsman counting, as on similar occasions, 'one, two, three!'—fell dead at the same moment. In the year 1826, the old man spoken of killed no fewer than thirty eagles from the hut in question; and ever since not less than from twelve to sixteen of those birds have been shot there annually.

## CHAPTER XXXII.

Wild Geese in Scandinavia—Different Species—Common in the Spring and Fall—Do not breed generally in Sweden—Go in large flocks—Very injurious to agriculture—Shooting Wild Geese—Curious Plan—Running them down with Dogs—Large quantities captured.

THE Grey-Lag, or Wild Goose, was common with us during spring and fall, both in the vicinity of Ronnum and in the neighbouring Skärgård. None of these birds, however, bred, I believe, in our part of Sweden. It is true that I have seen small flocks amongst the islands on the coast, about, or a few days after, Midsummer; but, as M. von Wright, who has there noticed similar flocks, observes, "They probably consisted entirely of males that had been unable to mate themselves, for as well amongst geese, as almost all other birds, especially aquatics, the males are much more numerous than females." Yarrell, on the authority of Mr. Dann, states, that, "On the inlets (query islets?) and islands from Bergen northwards, this goose is not uncommon during the summer, particularly about Hitteren, where they are tolerably numerous early in August, and one of our party shot one there, which proved to be a very large gander."

If the inference to be drawn from this is that the grey-lag goose breeds there, Yarrell is altogether at variance with Nilsson, who distinctly tells us that, as far as Scandinavia is concerned, it only nests, and that sparingly, in the more eastern parts of Sweden—from the northern portion of the province of Scania to about the 61° N. latitude—and never on the western coast of Sweden or Norway, or the interior of

the latter country. This bird (whose proper home Nilsson imagines—as is probably the fact—to be Russia and Siberia), Kjærbölling informs us, breeds sparingly in Denmark, where, however, it would seem in former times to have been much more abundant.

According to the naturalists quoted in the last paragraph, this species is the parent stock of the domestic goose. Jenyns, I notice, considers this to be highly improbable, for the reason that the common gander, after attaining to a certain age, is invariably white; but though the bean or other goose may be the progenitor of many of the tame geese, there can be little doubt that some of the latter, at least, owe their origin to the grey-lag goose. The eggs of this bird are described to be from five to eight in number, and of a dirty-white colour, inclining to yellow; they are three inches three lines in length, by two inches two lines in thickness.

The Bean Goose was very abundant in my vicinity during migration, and remained, more especially in the autumn, for a considerable time, but I never heard of its breeding with us. According to Swedish naturalists it nests in the more northern portion of Scandinavia, particularly amongst the islands off the western coast of Norway, within and about the polar circle. M. Malm describes it as pretty common in both Enare and Utsjoki Lapmark, where it breeds, he says, on the distant fjäll morasses. "It is remarkable," Nilsson observes, "that this goose is altogether unknown in Siberia, and in a large portion of the immensely extended Russian empire, where the grey-lag goose is so common." In Denmark, as in the more southern parts of Sweden, it is only seen during migration.

The bean goose is tamed with great facility. The following very remarkable instance of its domesticity, as well as affectionate disposition, is given in "The Natural History of Ireland." "At Springmount, near Clough, a male bean goose, slightly wounded in the wing, was placed with a flock of common geese, from which he at once selected a partner, and thenceforth paid no attention to any others of her sex. He was evidently most unhappy when separated from her, even in winter, and on one occasion was the means of saving her life. The cook being ordered to kill one of the geese, laid hold

of the first that came to hand, which happened to be the wild gander's partner, when so remarkably vehement were his cries, that even the uplifted hand of the murderess was stayed, and some members of the family, with others of the household, hurrying to the scene of uproar, the cause of the bird's anxiety was discovered, and the intended victim set at liberty. This was told to me in January, 1838, and no further attempts have since been made on the fair one's life. In November, 1848, they were removed to a new residence, where they continue, apparently, as happy as geese can be.

"For several successive years after this pair became associated, the goose laid a full complement of eggs, and sat on them even beyond the usual time, the gander keeping company at her side during the interesting period, but, unfortunately, no issue appeared. On a subsequent year, the goose sat closely on an empty nest in the bog, her partner never leaving the immediate vicinity, and guarding her most courageously. To test his courage, a person once lifted the goose off the nest and threw her into the water, when her brave and faithful partner instantly advanced, making a loud hissing noise, and, flying to the defender, struck him with his feet and wings with all his might. During the last summer the goose laid a few eggs, but was too much disturbed by dogs to incubate them long.

"To the calls of his wild brethren passing overhead the gander habitually replied, and in one instance it was feared he had bade adieu to the place, as he took wing and joined a flock high in the air; but, after holding a little converse with them, he returned, like a true lover, to his mate. This gander, perhaps in right of a higher descent than his associates who merely 'walk the earth,' at once, when put with the common geese, took the lead of the herd, sometimes numbering fifty or more, always heading them, and keeping about two yards in advance. None of the tame ganders had ever the inclination to dispute the chieftainship with him, and he proved a trustworthy guardian, as when his associates made an occasional sally into a corn-field, he took his station on the fence, and sounded an alarm when the enemy was seen approaching."

The White-fronted Goose.—During spring and fall this bird was pretty common, as well in the vicinity of Ronnum, as on the neighbouring coast. It passes the summer months in the more northern parts of Scandinavia. M. von Wright and M. Malm describe it as common throughout northern Lapland, where it breeds chiefly in the remote and sequestered tarns and morasses among the fjälls. In Denmark it is very common during migration, especially on the west coast of Jutland and the Duchies. The female is said to lay from four to six eggs, which are yellowish-white in colour.

The Common Bernicle.—This bird, as with the bean and white-fronted goose, nests in the far north, though sparingly, as it would seem. M. Malm indeed only met with a single pair (in the summer time) during his sojourn in northern Lapland; whence the inference is that its proper breeding-grounds are in the higher arctic regions. Its eggs are unknown to Northern naturalists. In parts of Denmark, it is pretty common during migration. At Gedsörgaard, it has been noticed for many successive years by M. Friis-a careful observer—that in the spring of the year this bird never arrives or departs excepting with a westerly or southerly wind; that in the autumn, on the contrary, it neither comes nor goes unless the wind be from the north or north-east. "At the end of September, or beginning of October, the common bernicle," according to Nilsson, "appears on the southern coast of Scania in large flocks, where it feeds not only on sea-weed, but on oat-stubbles; from which cause, it, in that province, is called the Hafre-gas, or oat-goose. When congregated they are very shy, and take wing at the least appearance of danger, but when separate, they are less afraid; and sometimes one meets with single birds so little apprehensive, that they will permit themselves to be killed with a stick."

The Brent Bernicle.—Like other wild geese, this bird was only seen with us, and on the neighbouring coast, during migration; and that, according to M. von Wright, not every year. It passes the summer in the far north. Swedish naturalists tell us that the greater part probably breed in Lapland and Finmark. But this can hardly be the case; for neither M. Malm nor other travellers make mention of seeing

it there at that season. Its proper home is doubtless in countries to the northward and eastward of Scandinavia. On the coasts of the Icy Sea, between the rivers Lena and Covyma, as also at the northern extremity of Kamtschatka, Pallas tells us, it is abundant; and from Holböll we learn that it breeds in Greenland, north of the 73° of latitude. In Denmark it is the most common of the migratory geese. Its eggs are unknown in the peninsula. During migration, this bird, as with the common bernicle, is seen in large flocks in the more southern parts of Sweden, and that as well in the inland lakes as on the coast. Its cry, which is continually heard when on the wing, consists of a deep murmuring sound, and hence its Swedish designation. It is described as being little shy, and easy of approach.

"In Holland formerly," Kjærbölling tells us, "the belief prevailed that the brent bernicle was not engendered by eggs in the same manner as other birds, but by a cirrhiped—a marine testaceous animal (*Lepas anatifera*, Linn.); but Barenz, a Dutch navigator, who visited Spitzbergen in the year 1595, where he met with immense numbers of these birds, together with their eggs, dispossessed the minds of his countrymen of this idle notion."

The Red-necked Goose is very rare in Scandinavia. It has never been seen there but during migration, and in very few instances captured. Two specimens, however, are preserved in the Museum at Lund, both said to have been killed in Scania. In Denmark it is also exceedingly rare. The proper home of this bird would seem to be the north-western parts of Siberia, where, according to Pallas, it breeds in large numbers in the morasses and lakes of the line of country bordering on the Icy Sea. At the end of August it migrates, and passes the winter months in the more southern parts of the Russian empire. It keeps in large flocks, and is never seen alone. These flocks never alight but in open and extended fields, and are extremely wary. They fly during the night, at which times they are taken by means of nets, in a manner that will presently be described. Many are retained in confinement by the inhabitants of the towns for the beauty of their plumage; and though naturally shy, they become in a few days perfectly tame. But they seldom live longer than over the first winter, for on the approach of spring, they usually pine away and die. The eggs of this bird are unknown to Swedish naturalists.

In certain districts in Scandinavia, where wild geese either breed, or abound during migration, they are looked upon as very injurious to the agriculturists. This is the case as well in the spring as in the fall, at both of which seasons they visit the cultivated fields in large flocks. In the former they devour and trample down the young rye, as well as pluck up the newly-sown grain; and, in the latter commit much havoc amongst the standing corn. In some places they are also complained of as doing very considerable damage to the pastures. Many devices are had recourse to in the peninsula to capture wild geese. In Lapland they are taken during the spring in These are set near to natural openings in the steel-traps. ice, where the birds are known to resort, and baited with the roots of the river horse-tail (Equisetum fluviatile, Linn.), or of the Ranunculus aquatilis, Linn.

When feeding in stubble-fields, or elsewhere, wild geese are also not unfrequently shot with the assistance of a stalking-horse; and if the animal be well trained, great execution may thus at times be done. But in lieu of a steed, a so-called Skjut-Ko, or shooting-cow, is made use of. "Such a one," M. Greiff tells us, is composed of strong canvas, in the form of a cow, and painted brown. For its easier transport it is rolled up, and when used is distended by means of several sticks. One of these is placed lengthwise, and one in each leg; and there is besides an unattached stick, which serves to support the Skjut-Ko when placed on the ground. At the shoulder there is a hole for the protrusion of the gun-barrel. On a particular occasion I made one of hoops and sticks, and covered it with canvas, so that it was hollow, and the Jägare could creep into The gun constituted one of the horns, and the Jägare's feet the hind-legs of the cow; but it was difficult to carry it when fences and the like intervened; and as one was always obliged to walk in a stooping posture, the fatigue of getting along in it was very considerable."

But the greatest destruction made among wild geese and

other aquatic birds is probably during the moulting season. In Lapland this usually begins about the middle of July, and continues for some three weeks, but its commencement and duration much depend on the state of the weather, for if the summer be cold and rainy, it begins later and lasts longer. Whilst moulting, the geese seldom frequent the great lakes, but resort for the most part to the numerous small tarns studding the face of that desolate country. In the night time the moulting fowl are much in the water, but during the day they are generally ashore, and often at a considerable distance away from the strand, seeking their food, or reposing among the tussocks in the neighbouring bogs and morasses.

"At this season," so we are told by Lieutenant F. Robson, "the Finnish ny-byggare, or squatters, as well as the Lapps, get up regular hunts. Provided with several dogs, they proceed to the morasses where geese are known to resort, which, although frequently very wet and difficult to traverse, are not impassable. Fire arms are needless, it being considered superfluous to waste powder and shot when the birds may be obtained without; the men, therefore, are only equipped with When arrived at the scene of action, the dogs stout sticks. are slipped from their couplings and start the birds, whose only means of escape is by reaching the nearest water. Should they succeed in this they commonly manage to get off; but should they not be so fortunate, the dogs soon come up with them, and by a bite in the head or neck, presently put them out of their misery. In the meanwhile, the sportsman with his stick kills such as he falls in with. But as on these occasions the birds retreat very quickly, he would have much difficulty in overtaking them if he did not, during the chase, proceed on the principle of never running directly after, but alongside of and past them, and as if not aware of their presence; in which case they, believing themselves unobserved, squat at once, and conceal themselves in the grass, where they remain entirely motionless, so that one may go directly up to the spot, and secure them with the hand.

"The wild geese often lie so close as to suffer themselves to be wounded and mangled by the dogs without giving the least signs of life; but swans, and even geese, will nevertheless at times place themselves on the defensive, for which reason large dogs are used. As these, however, only kill the birds, and are not taught to retrieve, it may easily happen that the sportsman, after the termination of the hunt, and when collecting the birds, has great difficulty to find them in the high and thick grass. The summer of 1827 was not a successful one, but during the preceding year the inhabitants of Killinge, in the parish of Gellivaara, thus captured, of wild geese alone, upwards of sixty."

Again: "When one meets with the large geese in the moulting season in the mountain lakes," writes Læstadius, "and that a boat be not at hand, one may drive them to the shore either by casting of stones or by swimming. In the year 1828, here in Karesuando, upwards of one hundred wild geese were killed by several squatters in a remote and sequestered lake." The reverend gentleman tells us farther, "that whilst moulting, the geese make long pedestrian excursions from one lake or tarn to another, and that in the autumn of 1821, a Lapp knocked five of these birds on the head at the summit of the well-known fjäll, Sulitelma."

"The hunts after wild geese," says the Major Count Jakob Hamilton, who writes from the province of Småland, where some few of the Anser ferus breed, "usually take place about the 28th of June. At that period the old birds have lost their wing-feathers, and the young cannot fly. As geese are very wary and shy, it is difficult to come within shot of them. The most successful plan is either at a late hour of the evening, or at an early one in the morning, to lie in ambush at a favourable spot on the strand, and await their coming. One then makes use of a gun of large calibre, and when the flock after the first discharge is scattered, dogs are slipped and pursue them. The young then commonly take refuge on the shore, where they can be easily overtaken and captured by the dogs. One can often in the course of the day, if the jagt be well arranged, bag from thirty to forty geese."

But a still simpler plan of capturing wild geese in the moulting season is adopted in Pomerania—formerly an appendage to the Swedish Crown—which, from its ingenuity, is worthy of description. "On the isle of Ruden, situated over

against Wolgast," so we read in 'Johannis Micrælii Antiquitates Pomeraniæ,' 1725, "there is excellent jagt to be had after wild geese. During Whitsuntide, when those birds begin to moult, and consequently, from their inability to fly, cannot avoid, except by diving, the eagles and hawks, they are constrained to remain the whole day in the water. But in the night time, on the contrary, they must of necessity repair to the land to seek their food. In the evening, therefore, nets are laid flat along the shore, and covered with sand to conceal them from view; but after the geese have, in all innocence, passed over the nets, these are placed upright, and the birds driven towards them, and as they cannot fly over them, they soon become entangled in the meshes, and are quickly knocked on the head with sticks. In this manner forty, fifty, or more, are killed in a single night."

## CHAPTER XXXIII.

Shooting the Hazel Hen—Its appearance—Very abundant in the North—Habits—Shooting the Wood-cock in Scandinavia—Not very numerous—Its Food—Breeding-places—Migratory Habits—Shooting Black-cock in Scadinavia—Good Sport to be had in some parts—Very amusing Sport—Interesting Habits of the Bird—Shooting Snipes in Scandinavia—Exceedingly Good—The Double or Solitary Snipe—Breeding and Feeding Habits of the Snipe—Wild Duck-shooting.

In the course of my rambles into the forest, I now and then shot a hazel hen. These birds, which are of a brown colour, and of about the size of the partridge, are probably the most beautiful of the grouse kind; they are, however, too well known in England to need any particular description. Their flesh is considered a great delicacy, and as the most wholesome of the Swedish game. The hazel hen is in some abundance in all the northern parts of Scandinavia, but it is not generally

to be found, says Mr. Nilsson, farther to the southward in that peninsula than the sixty-ninth degree of latitude. That gentleman thinks this rather remarkable, as those birds are to be met with in both Germany and France.

Swedish naturalists are of opinion there are two kinds of hazel hen: the one holding to the vicinity of the fjälls; the other, to the lower parts of the country; but in the few that I have shot, I do not recollect of noticing any particular difference in regard to either size or plumage. Unlike the capercali, and the black-cock, either of which may have a numerous seraglio, the hazel hen regularly pairs. The hen makes her nest upon the ground, and lays from eight to fourteen eggs.

The hazel hen derives the principal part of its sustenance, during the summer months, from worms, insects, and berries; but in the winter-time, when the ground is deeply covered with snow, it feeds a good deal upon the buds of the birch, alder, and other trees. It generally frequents the thickest brakes of the forest, and in most instances is to be met with on the ground. When flushed it always takes into the trees. Even then, however, it never sits on the tops of the pines, as Mr. Nilsson imagines to be the case, but half, or at most two-thirds, up the tree. Its flight, which is quick, and attended with much noise, is usually very short. The hazel hen is a very stupid, or rather tame bird; for it will often allow a person, even when immediately near, to fire at it more than once without taking wing. When the Northern chasseurs go in pursuit of this bird, they are usually provided with a small pipe, called a Hjerpe pipu. This so exactly imitates its call, that, on hearing the pipe, it is almost sure to answer, and, in consequence, the sportsman has no great difficulty in discovering it, even if concealed by the foliage of the most luxuriant trees.

The hazel hen is frequently shot in the Scandinavian forests with rifles carrying a ball of the size of a pea; but small shot is often made use of. I never heard of more than eleven of those birds being killed by a person in any one day. This arises from the extreme difficulty of finding them when shrouded in the pines. Though I have often shot the hazel hen, I never made a point of looking after those birds, as, from their habits, I always thought it a very tame sport. I never saw it

in a state of confinement; but I have no reason to suppose it might not be easily domesticated, or that it might not be introduced into the United Kingdom.

Occasionally, also, I killed an odd wood-cock. These birds, as it is well known, breed in Sweden; and though I have never happened to meet with their nests, such were not uncommonly found in the vicinity of Stjern. I have, however, shot the young birds when hardly able to fly. When speaking of the wood-cock, Mr. Greiff says, "It has been the belief that the wood-cock has two broods in the year, because young ones have been found just hatched in the month of August: but I think that the cause of the supposition is this, that as woodcock-shooting [at flight-time] continues until the summer is far advanced, some of the males may have been shot, and a new pair may have been formed later than usual." He further adds, "If, in shooting, you meet with a brood of wood-cocks, and the young ones cannot fly, the old bird takes them separately between her feet, and flies from the dogs with a moaning crv."

The wood-cock, as it is well known, is a bird of passage. usually took its departure from Sweden towards the end of October, or beginning of November, and did not return until the approach of spring. Mr. Grieff says, he never knew the wood-cock to make his appearance in the vicinity of Stockholm until the 6th of April, which about tallies with the time of their leaving our shores. Wood-cocks were exceedingly scarce in the vicinity of Stjern, which was also the case in all other parts of Scandinavia that I ever visited. This may be supposed when I mention that I never killed more than three in any one day during my stay in the North of Europe. Indeed, I never saw more than seven or eight of those birds in the course of a day's shooting, and very generally not onefourth part so many. During the wood-cocks' periodical migrations, however, for in the winter, not one of them remains in Scandinavia, it is said they are occasionally to be met with in considerable numbers on the western coasts of Sweden and Norway.

As it is from these and the adjacent countries that our covers are supposed to be principally supplied with wood-

cocks, it may seem extraordinary that those birds should there be so scarce, and so plentiful in places with us. But this is easily explained, when we consider that on their breeding-grounds, extending over the whole of the North of Europe, there is probably a thousand times as much wood as in the United Kingdom; and consequently, when a considerable portion of them come to us, and are concentrated, if I may use the term, into our small covers, they naturally make a very great show.

It is generally said that wood-cocks are less plentiful in Great Britain than was the case formerly. This I have heard attributed to the Scandinavians eating the eggs of those birds. If, however, persons who entertain this opinion were to see the almost boundless Northern forests, they would probably think with me, that if the whole of the scanty population of that part of the world were to go out for the purpose, they would not be able to explore the hundredth part of the woods in the course of a year, and consequently they could not take or destroy any considerable number of eggs. If they are really scarcer than they were, it is doubtless in degree attributable to the greater number of persons who are in the habit of shooting at the present day than was the case formerly. Though I have shot very, very many hundred brace of woodcocks in my time, I have had little opportunity of studying their migratory, and other habits: I shall therefore quote what the late Sir Humphrey Davy says in his "Salmonia" regarding the Natural History of those birds. Coming from so distinguished a naturalist, these remarks cannot but be interesting to the sportsman.

"The woodcock feeds indiscriminately upon earthworms, small beetles, and various kinds of larvæ; and its stomach sometimes contains seeds, which I suspect have been taken up in boring amongst the excrements of cattle; yet the stomach of this bird has something of the gizzard character, though not so much as that of the land-rail, which I have found half-filled with seeds of grasses, and even containing corn, mixed with May-bugs, earth-worms, grasshoppers, and caterpillars. The woodcock, I believe, breeds only in high northern latitudes; yet there are woods in England, particularly one in

Sussex, near the borders of Hampshire, in which one or two couple of these birds, it is said, may always be found in summer.

"I suspect these wood-cocks are from the offspring of birds which had paired for their passage, but being detained by an accident happening to one of them, stayed and raised a young brood in England, and the young ones probably had their instincts altered by the accidents of their being born in England, and being in a place well supplied with food. It is not improbable, that they likewise raised young ones, and that the habit of staying has become hereditary. There can be no doubt, that wood-cocks are very constant to their local attachments: woodcoeks that have been preserved in a particular wood for a winter, always return to it, if possible, the next season. Many woodcocks breed in Norway and Sweden, in the great extensive and moist pine woods, filled with bogs and morasses, which cover these wild countries; but probably a still greater number breed farther north, in Lapland, Finland, Russia, and Siberia. It is, I believe, a fable, that they ever raise their young habitually in the high alpine or mountainous countries of the central or southern parts of Europe. These countries, indeed, in the summer are very little fitted for their feeding; they cannot bore where it is either dry or frosty, and the glacier, as well as the arid sand or rock, are equally unfitted for their haunts. They leave the north with the first frost, and travel slowly south till they come to their accustomed winter quarters; they do not usually make a quick voyage, but fly from wood to wood, reposing and feeding on their journey: they prefer for their haunts woods near marshes or morasses; they hide themselves under thick bushes in the day, and fly abroad to feed in the dusk of the evening. laurel or a holly-bush is a favourite place for their repose: the thick and varnished leaves of these trees prevent the radiation of heat from the soil, and they are less affected by the refrigerating influence of a clear sky, so that they afford a warm seat for the wood-cock. Wood-cocks usually begin to fly north on the first approach of spring, and their flights are generally longer and their rests fewer, at this season than in the autumn. In the autumn they are driven from the north to the south by

the want of food, and they stop wherever they can find food. In the spring there is the influence of another powerful instinct added to this, the sexual feeling. They migrate in pairs, and pass as speedily as possible to the place where they are likely to find food, and to raise their young, and of which the old birds have already had the experience of former years. Scarcely any wood-cocks winter in any part of Germany. In France there are a few found, particularly in the southern provinces, and in Normandy and Brittany. The woods of England, especially of the west and south, contain always a certain quantity of wood-cocks; but there are far more in the moist soil and warmer climate of Ireland; but in the woods of southern Italy and Greece, near marshes, they are far more abundant; and they extend in quantities over the Greek Islands, Asia Minor, and Northern Africa."

Now and then, likewise, I shot two or three black-cock. These birds, which at the present time are so numerous with us in England, are to be found over most parts of Scandinavia; and in far greater abundance than the capercali. Nilsson says that the black-cock has a sharp sight, and that his senses of hearing are more acute than those of other birds; that he wanders, but never migrates; and, if not much disturbed, he always returns to the same places during the breeding-season. Owing to the country in the vicinity of my residence being deeply wooded, I never killed any considerable number of black game thereabouts; for it generally happened that when I was fortunate enough to flush those birds, the thickness of the cover prevented me from getting shots. In the more southern parts of Sweden, however, I have occasionally met with very tolerable sport. Indeed, when the season has been well advanced, I have more than once killed nine brace of black game in a day.

In the early part of the autumn, those birds, as it is well known, are generally to be found on moors and morasses. As the winter, however, approaches, they fall more into cover; they then usually pack, and, from becoming excessively wild, it is not easy to approach within range of them, excepting with a rifle. Were the black-cock to be taken more care of in Sweden than is generally the case, from the very favourable

nature of the country, those birds would doubtless be far more plentiful than at present. This is exemplified at Kafweläs, the seat of Count Frederick von Essen; for, owing to that nobleman seldom allowing hens to be killed, and never permitting shooting in the spring of the year, black game is by all accounts exceedingly numerous on his very extensive estates. As a proof of this, Mr. Greiff states, that one hundred of those birds are not unfrequently killed at Kafweläs in a day.

As among the capercali, varieties in point of colour are occasionally to be met with in the black-cock; I have seen two of those birds, at different times, whose plumage were beautifully variegated with white. One of these, indeed, is preserved in the collection of one of my friends in England. The black-cock is easily domesticated, and becomes much tamer than the capercali. Mr. Nilsson mentions an instance where the black-cock has been known to breed with the barndoor fowl; but the chicks, very unfortunately, only survived a few days. This, if true, is a very singular fact. It is destroyed in Sweden by a variety of means, many of which are similar to those I have described when speaking of the capercali. It is during the spring, however, that the greatest destruction takes place among those birds. At this time, as it is well known, they assemble together in large numbers, when, like the capercali, they have their particular stations (orr-lek).

"To shoot black game at this time," Mr. Greiff (that enemy to poaching) observes, "is a most amusing sport. They commence their play rather earlier in the season than the capercali; and in the beginning of April, forty or fifty, or even more, may be seen together. Like the capercali, they meet at an early hour in the morning. Their lek is generally on large mosses, downs, meadows, etc., and even on the surface of lakes, rivers, etc., which remain frozen late in the spring. An old black cock, who is called the playing cock (or several, if the pack be sufficiently large), acts as the master, and does not allow the others to play; but the young cocks are suffered to blow and fight with each other, and to remain with the hens. This term blow alludes to the love-song of the black-cock. He com-

mences, as it is well-known, with a sort of cooing, and finishes with a loud, shrill, hissing kind of noise. Unlike the play of the capercali, which can only be heard at a short distance, the notes of the black-cock are audible a very long way off. The playing cock ought never to be shot, because that may occasion the dispersion of the whole pack; but those that blow and fly about the lek may be killed, and sometimes one may get several at a shot when they are in the act of fighting. If one remains quiet in the place of concealment after the shot, the birds continue, notwithstanding their noise, and play and fight as bravely as ever.

"At sunrise they cease for a short time, but soon commence again in full playing order; afterwards, in an hour, or perhaps more, they retire from the lek, and perch upon the tops of trees. In those places where there are so few black game that they cannot form a regular lek, they are called Squaltorrar, or wandering birds. To shoot black game at the lek, huts are made of pine-branches—the lower the better. If the ground be marshy, have a large tub sunk into it, and some low branches placed around it. Such a hut never frightens the birds, and the tub preserves you from being wet. Many believe that the black-cock does not hear when he plays; but this is false. When there is only a single hen in his company, you may, it is true, approach very near to him, so long as he does not hear the hen take wing."

"The old black-cock," says Mr. Greiff again, "is best shot with a pointer at the time he moults. You never see an old cock follow a brood, although you may occasionally find him in the vicinity. In the middle of August, or somewhat earlier, when the young ones become of a blackish colour, and get white feathers in their tail, then is the right time to shoot them with the assistance of a pointer, upon heaths, mosses, and in underwood. If you then spare the hens, you are sure of a good breed the following year. With the exception of partridges and double snipes, there is no kind of game in which one can make greater execution in the course of the day."

There are a good many snipes in the vicinity. The marshes, however, frequented by those birds, are not very extensive;

but if a person be well acquainted with the ground, better snipe-shooting is hardly to be met with in any country. As a proof of this, I have bagged upwards of thirty brace of those birds in seven or eight hours. These were either the common or the double snipe, as I was careless of wasting my powder and shot about the jack or half-snipe.

The double, or solitary snipe, I always found singly, or at most in pairs. It is nearly twice as large as the common snipe, its bill is shorter, and its breast is spotted with grey feathers. These birds are usually so fat in the autumn as apparently to be hardly ably to fly; indeed, if flushed, they usually proceed but a short distance before they settle again; their flight is heavy and steady, and they present the easiest mark possible. Four couple was the greatest number of those birds that I ever killed in Sweden in any one day. "The double snipe," Mr. Greiff says, "is a bird of passage, and amongst those which arrive the latest. At the end of the month of July, when the meadows are mowed, the shooting of these birds with the pointer commences, and continues till towards the end of September. In the whole round of sporting, this affords one of the greatest pleasures. These birds are easy to shoot, and in some places fifty or sixty, aye, considerably more, may be killed in a day, particularly in autumn, when they are so fat that they almost burst their skins. most delicious eating." Mr. Greiff adds in a note, "I was already an old sportsman of thirty years' standing before it came to my knowledge that double snipes had their lek, or playing-ground. I heard their cry a whole spring, which was in a marsh where I had a good orr-lek, but never observed them, and therefore believed it to be some frogs or reptiles, but at last I discovered they were double snipes, which ran like rats among the hillocks. Their cry is commenced with a sound resembling the smack of the tongue, and thereupon four or five louder follow."

According to that writer, "the flight of the single or common snipe is very quick, and he is among the most difficult of birds to hit, for if you cannot manage to shoot immediately that he takes wing, he begins directly to fly in a zig-zag direction. He is shot with the assistance of a pointer,

but as he does not lie well to a dog, the best way for the sportsman is to walk him up alone."

When in search of snipes I occasionally shot a few ducks, indeed, I have in this manner bagged nine of those birds in a day. Though I cannot give much information upon the subject, I apprehend very good snipe-shooting is to be met with in many parts of Scandinavia. I have seen abundance of those birds near to the town of Norrköping, situated, as I have said, on the eastern coast of Sweden. Sir Humphrey Davy gives us some very interesting information regarding the scolopax tribe.

"The snipe," he says, "is one of the most generally distributed birds belonging to Europe. It feeds upon almost every kind of worm or larvæ, and, as I have said before, its stomach sometimes contains seeds and rice; it prefers a country cold in the summer to breed in: but wherever there is much fluid water, and great morasses, this bird is almost certain to be found. Its nest is very inartificial, its eggs large, and the young ones soon become of an enormous size, being often, before they can fly, larger than their parents. Two young ones are usually the number in a nest, but I have seen three. The old birds are exceedingly attached to their offspring, and if any one approach near the nest they make a loud and drumming noise about the head, as if to divert the attention of the intruder. A few snipes always breed in the marshes of England and Scotland, but a far greater number retire for this purpose to the Hebrides and Orkneys. In the heather surrounding a small lake in the island of Hoy, in the Orkneys, I found, in the month of August, in 1817, the nests of ten or twelve couple of snipes. I was grouse-shooting, and my dog continually pointed them, and as there were sometimes three young ones and two old ones in the nest, the scent was very powerful. From accident of the season these snipes were very late in being hatched, for they usually fly before the middle of July; but this year, even as late as the 15th of August, there were many young snipes that had not yet their wing-feathers. Snipes are usually fattest in frosty weather, which, I believe, is owing to this, that in such weather they haunt only warm springs, where worms are abundant, and they do not willingly

quit these places, so that they have plenty of nourishment and rest, both circumstances favourable to fat. In wet, open weather, they are often obliged to make long flights, and their food is more distributed. The jack-snipe feeds upon smaller insects than the snipe; small white larvæ, such as are found in black bogs, are its favourite food; but I have generally found seeds in its stomach, once hemp-seeds, and always gravel. I know not where the jack-snipe breeds, but I suspect far north. I never saw their nest or young ones in Germany, France, Hungary, Illyria, or the British Islands. The common snipe breeds in great quantities in the extensive marshes of Hungary and Illyria; but I do not think the jacksnipe breeds there, for even in July and Angust, with the very first dry weather, many snipes, with ducks and teal, come into the marshes in the south of Illyria, but the jack-snipe is always later in its passage, later even than the double-snipe, or the wood-cock. In 1828, in the drains about Laybach, in Illyria, common snipes were seen in the middle of July. The first double-snipes appeared the first week in September, when likewise wood-cocks were seen. The first jack-snipe did not appear till three weeks later than the 29th of September. was informed at Copenhagen, that the jack-snipe certainly breeds in Zealand; and I saw a nest with its eggs, said to be from the island of Sandholm, opposite Copenhagen, and I have no doubt that this bird and the double-snipe sometimes make their nests in the marshes of Holstein and Hanover. excellent sportsman and good observer informs me that, in the great royal decoy, or marsh preserve, near Hanover, he has had ocular proofs of double-snipes being raised from the nest there; but these birds require a solitude and perfect quiet, and their food is peculiar—they demand a great extent of marshy meadow. Their stomach is the thinnest amongst birds of the scolopax tribe, and as I have said before, their food seems to be entirely the larvæ of the tribulæ, or congenerous flies."

In the river immediately near to Gothenburg are some very extensive reed-beds covering, I should imagine, some hundred acres of ground. In these, great numbers of duck, widgeon, teal, are to be met with. From the continual war, however, which is carried on against those birds, they are generally

exceedingly shy. The usual manner of shooting wild fowl in these reed-beds is out of a small boat. The sportsman stands at the head of this, whilst a man at the stern propels her through the reeds, as silently and quickly as possible, with a pole. Thus one is often enabled to steal pretty close upon the birds before they take wing. I have adopted this plan on several occasions; but owing either to bad management, or some other cause, I never met with even tolerable success.

The most favourable time is when there is much water in the river, for then the boat may be punted in every direction. Should the contrary, however, be the case, she makes such slow progress, that the wild fowl have time to swim out of the way, and besides she is often sticking fast in the mud. Windy weather is the most favourable for the purpose, as the birds cannot so well hear the approach of the boat.

During one of my expeditions after ducks I left my boat in the reed-beds, and proceeded on foot towards some of those birds which I had observed to alight at a little distance. On my return, however, I found my man in no small fright, which was not altogether without reason. It appeared that during my absence some people on the land, to which we were immediately near, had fired a large ball, which, after almost scraping his side, lodged in the stern of the boat, at the very spot where I had been previously sitting. On hearing this, I ordered my man to pull to the land, for the purpose of questioning the people who had fired the shot, as to the cause of this extraordinary and unwelcome salute; but on seeing us make for the shore, and suspecting, perhaps, that they had done some mischief, they took to their heels and ran for the town as fast as they were able.

Abundance of ducks breed in all the lakes and rivers throughout Scandinavia, and consequently excellent shooting is to be had at these birds. But geese and swans principally confine themselves to the wide wastes of Lapland, which teem with every description of wild fowl.

Mr. Greiff, among other observations regarding the wild duck, says:—"As soon as the duck begins to sit on the eggs, the drake separates from her, and does not see her more, unless they by chance meet when they migrate in the autumn.

The shooting at these birds commonly begins before the generality of the young ones are full feathered, with dogs broken in for the purpose; but this is a destructive sport, and of little use to the larder. People boast of having shot in this way above a hundred in a day, but they do not mention that at least two-thirds were not fit for eating. When the young ones are able to fly a little, then is the right time for this amusement; and then you have both pleasure and profit in it. In lakes and rivers where there are reed-beds and long grass a small light boat is used, in which the sportsman stands, and is impelled gently forward; thus he has an opportunity of firing one shot after another as they rise, for the young duck seldom takes wing before it is within shot. When the young ones can fly well, the old bird conducts them towards nightfall to marshes and rivulets, from whence they again betake themselves in the mornings to the large lakes. If you find out their places of resort, you can obtain some most advantageous shots by approaching them by stealth. They can also be shot on the wing by call during flight-time, which is either late in the evening, or at an early hour in the morning.

"With a horse, broken in for the purpose, and who is not afraid of the report of the gun, a person may obtain good sport at ducks, and the larger birds of passage during the spring and autumn. An artificial cow, or rather the profile of one, can also be used to advantage. This is made of sail-cloth, in the form of that animal, and painted brown. For its more easy conveyance it is rolled up, but when used it is extended by means of sticks into its proper shape. One of these is placed lengthwise; two others, which are sharp at the ends, are attached to the legs; whilst a fourth supports it when placed on the ground. At the shoulder of the figure a hole is perforated, through which, when necessary, the barrel of the gun may be thrust.

"I have used another method which answered admirably; I made an artificial cow with hoops and splints, covered with sail-cloth, so that it was hollow, and a person could creep into it. The gun formed one of the horns, and the sportsman's feet the back legs of the cow; but as one must go constantly bent, it was very fatiguing, and it was also difficult to trans-

port at times when fences, or such like impediments, intervened."

Among the other wild fowl to be found in the peninsula, a concluding reference may be made, to the Wild Swan. It is very abundant during the spring and fall, when on its way to or from the breeding places in the far north. Some indeed, usually remained during the whole winter, as also did a considerable number on the neighbouring coasts. With a suitable gun, good sport may be had in shooting this interesting bird. It is not very difficult of approach, and if disturbed does not, as a rule, fly far, but soon alights again. They evince much less fear than many other kinds of waterfowl. Formerly, when swan-skin pelisses and muffs were the fashion, swan-skins were as valuable as those of the fox, and produced the local governor a considerable annual income. In these former times several grand swan hunts were annually got up during the moulting season, when the birds were comparatively helpless; the immense flocks of swans were approached on water by means of boats. These hunts were conducted on the same principle as skalls for wild beasts, in so far as, that the inhabitants were compelled by law to lend assistance. Six hundred swans and upwards have been killed or taken alive in a single day. But at the present time this wholesale capture of the swan seems to be almost entirely abandoned. In conclusion,—at battues in England we pride ourselves, and with some justice, on the rush of pheasants; but beautiful as it is to see a hundred or two of these splendid birds on the wing at one time, surely ten or twelve hundred swans should carry away the palm.

THE END.

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